Indian Finance Year-Book

1934

ANNUAL SUPPLEMENT TO
"INDIAN FINANCE"

Editor:
P. R. SRINIVAS

Managing Editor:
C. S. RANGASWAMI

20, BRITISH INDIAN STREET
CALCUTTA

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IN EXTENUATION

The *Year-Book* sees the light of day considerably behind the time. The delay is, doubtless, inordinate. And our readers have probably reason to feel aggrieved. But we must point out that we have always regarded the *Year-Book* as a valuable addition to the literature on Indian economy and not as a routine supplement. In endeavouring to cover the entire national economic life we have met with difficulties, disappointment and delay. And for our part we have been unwilling to subordinate the quality of the publication to the rigorous requirements of the time table. The reader will judge for himself to what extent the various sections have been expanded in scope and enriched in detail. The experiences of the past three years have been fruitful in inducing the confidence that henceforward, the *Year-Book* will be brought out within three months of the close of the financial year.

P. R. SRINIVAS,
Editor.

C. S. RANGASWAMI,
Mg. Editor.

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NATIONAL FINANCES IN 1933-34

When the economic history of this decade comes to be written 1934-35 will, by all tokens, be found to possess a unique importance. For while it is yet too early to say that the year marked the beginning of a revival, it is certain that it has seen the world settle down to the vast changes which, in part brought about, and in part, followed, the unprecedented depression. It is well-known that economists and businessmen have outlived the first flush of enthusiasm about the revival of trade, of which the first signs were visible in the Autumn of 1932. They are now persuaded that though there has been a perceptible improvement in world trade and economy, it is futile to hope that the world will automatically go forward unchecked to the heights of prosperity which in 1929 were considered the norm. They have veered round to the view that international trade has come to be more or less stabilised at a new low level and that the scope of its expansion is extremely limited by the new orientation of economic policy in almost every country of the world. This is, however, not to be mistaken for an unmitigated pessimism about the prospects of world economy. It is by no means impossible that what the nations lose in foreign trade might be made up by the stimulation of productive and distributive activity within the borders of each nation. It follows, therefore, that the recovery from the depression is to be and, for the matter of that, will be, sought along lines unfamiliar to the régime of free international trade.

The significance of this to an interpretation of the events and experiences of 1933-34 should not be difficult to see. Governments and businessmen have to accept some of the consequences of the depression as of a permanent nature and to seek for compensation for such adverse trends, rather than wait for their disappearance or work for their obliteration. In other words, some at least of the features of the depression years have come to stay. This is true, both of trade and economy and of the national finances. The former have expanded within limits imposed by the new economic policies of the nations, the latter has seen a relaxation in the stern outlook of affairs which characterised the dark days of 1931-32. The history of the Indian Government finances during these years is by no means the history of the smooth success of well-planned measures of financial reform. The country still groans under the staggering burden of the new imposition of the Emergency Budget. In fact, more duties have been added. There is yet no sign of ease in the financial position either for the country at large or for the Government. But there has been enough in our past experience to show that our difficulties are of a purely transient nature. While it is perfectly valid to criticise the Government for overlooking many measures of economy which they could and should carry out, it must, at the same time, be recognised that the Fiscal system has to be refashioned with reference to a new era rather on the model of the pre-depression period.

Generally speaking, the Central and Provincial Governments in India have left behind the period of heavy revenue deficits; and in some case like Madras and the Central Government there have been some surpluses, too. While opinion may vary as to the significance of these surpluses, there can be no question that in spite of the many disappointments that attended the working of the Emergency Budget, the additional taxes have brought about a rough budgetary balance. In the case of the major Provinces of Bengal, Bombay and Madras, Bengal has alone been noted for its chronic deficit. The revised estimate for 1933-34 and the Budget Estimates for 1934-35 alike disclose a deficit of about Rs. 2 crores; and the Bengal Government have turned the apparent

hopelessness of this position into a source of strength by impressing upon the Government the imperative necessity of a large contribution sufficient to cover the threatened deficit. As for Bombay, when the estimates were first presented to the Legislative Council the Finance Member was in a position to state that the apparently hopeless task of balancing the budget had been nearly accomplished and that Bombay was then in a position to claim that she had a sound financial position. Unfortunately, however, before the Bombay Legislative Council could complete its discussion of the Budget, the Government and the public of the Presidency suddenly became aware of serious threats to the economic well-being of the province. It was found that the threat of diversion of trade from Bombay to the Ports of Kathiawar had assumed enormous proportions and that on the top of it all there was the possibility of the utter extinction of Bombay's export trade in cotton on account of the heavy railway, port and handling charges which outgoing cotton had to pay, if it was to seek its outlet through the port of Bombay. While the former raised questions beyond the control of the local Government, the latter lent itself to immediate action; and for once the gravity of the problem forced the Government, the railways, the Municipal Corporation and the Port Trust to act in concert with a view to reduce the burden on Bombay's export trade and cotton. Bombay is still agitating over the Government of India taking necessary action for removing the handicap on Bombay in its competition with the port of Kathiawar for the import trade into India. It might, perhaps, be mentioned here that the Native States of Kathiawar gained their advantage over Bombay from the fact that the port charges there are lower than in Bombay. It has been contended on behalf of Bombay that the Native States are in a position to levy uneconomic rates, as some of them are entitled under their treaties with the Central Government to keep the import duties themselves, even if the imported articles should represent more than the quantities consumed within their borders. As this involves the revision of treaties of long standing, the Government cannot act. It is too much to believe that with this continued diversion of trade to the ports of the Native States, Bombay can expect to have its budget balanced during the coming year. But considering that there is a fair degree of improvement in business conditions, Bombay may not have to fear serious financial difficulties.

In Madras the financial position is well in hand; and the revenue and reserve funds have been maintained practically intact as it was at the end of last year. But the Province has paid a heavy price for this balance in the Provincial budget. The agrarian suffering is at its worst in the Southern Presidency—rice has not yet participated to any extent in the general revival. Prices are at the same dead level; and naturally the demand for payment of land revenue has gathered strength during these months. The Government have at last been obliged to confirm the temporary remissions of land revenue effected in the past and to effect a reduction of 12½ per cent. for the land revenue of the current *fasli*. As for the other Provinces, it is well known that Bihar and Orissa suffered the devastations of the earthquake immediately after the budget estimates were prepared by the Government. In the Punjab, the difficulties of wheat are second only to those of rice in the South.

It will be seen from a cursory survey of the Provincial Budget that such improvement as has been effected in the financial position of the Provinces has been at the cost of high human suffering and that in the Centre the very claim of Government to having balanced the budget is open to doubt and question.

Whatever may be said of the financial administration of Sir George Schuster which has come to an end with the year under review, it must be conceded that during his regime he never lost an opportunity of emphasising the importance of relating the budgetary plans of the Government to the conditions of the national economy. And in February last, particularly, he utilised the occasion of the Budget Speech not only to review the whole administration but also to examine the economic conditions in the country and to outline the policy which the Government would be ready to follow. In such a survey he naturally claimed that the plans as laid out in the Emergency Budget of September, 1931, had worked fairly smoothly except for a few unavoidable disappointments of a minor kind ; that by sticking to the orthodox and sound principles of finance the Government of India had gained control over its problems and discharged its essential duties ; and that the achievement of soundness in the

financial position enables the revision of the general position and the adoption of policies suited to the altered conditions. It is well known that Sir George Schuster had been insisting for a long time that the progress, which India had made in the pursuit of a policy of discriminating protection, involves the necessity of finding other alternative sources of revenue which the Government had foregone for the sake of indigenous industry.

The practical effect of this recognition is the imposition of an excise duty upon the production of sugar in India. As is well known the Budget for 1934-35 also includes the levy of an excise duty on matches but it is, however, on a different footing, inasmuch as it is, in effect, an *ad hoc* levy for the special purpose of giving relief to Bengal for her chronic impecuniosity and to Bihar and Orissa for her losses she has sustained as a result of the earthquake. But whatever the causes may be, it is significant that by the time Sir George handed over charge to his successor, he had completely exhausted all the sources of revenue available in this country and he had also established, for all practical purposes, the principle of levying an excise on internal production with a view to making good for the Government the revenue lost through the reduction, or the more or less total disappearance, of imports from abroad. To the extent that the Government of India shall no longer be harking back to the days of sumptuous revenue from Customs, the change marks the advent of realism in our financial affairs.

We may now proceed to a detailed discussion of the actuals for 1932-33, revised estimates for 1933-34, and the budget estimates for 1934-35. The final accounts for the last year show, after providing Rs. 6.84 crores for reduction of debt, a surplus of Rs. 1.55 crores. 1932-33 was covered by the Emergency Budget which was announced in September, 1931 ; and the latter provided for a two-year period as a single unit, the years in question being 1931-32 and 1932-33. It is, therefore, necessary to study the actuals for 1932-33 in conjunction with the actuals for 1931-32 and in relation to the forecasts in the emergency plan of 1931. The final accounts for 1931-32 showed a deficit of Rs. 4.86 crores without providing for any contribution towards reduction or avoidance of debt; the corresponding figure in the actuals of 1932-33 is Rs. 8.39 crores. Sir George, therefore, claims that "the net result is that, over the two years combined, we not only paid our way so far as budgetary income and expenditure is concerned, but in addition provided a sum of Rs. 3.53 crores for reduction of debt."

What were the forecasts made by the Finance Member in September, 1931? He then anticipated, after allowing for the normal provision for reduction of debt, a deficit of Rs. 10.17 crores for 1931-32 to be followed by a surplus of Rs. 5.23 crores for 1932-33 ; the net amount available for the reduction of debt in the two years, after allowing for the deficiency on the combined results, was estimated to be Rs. 9.11 crores. It will thus be seen that compared to the anticipations in the emergency plan, the actuals for the two years covered in that plan show a worsening of Rs. 5½ crores. In his speech last year, Sir George anticipated that the net amount available for the reduction of debt on the basis of the revised figures for 1932-33 would be Rs. 4.15 crores. As against the original anticipation of Rs. 9.11 crores as the sum available for the reduction of debt, and as against the revised figure of Rs. 4.15 crores, the actuals yielded only Rs. 3.53 crores for this purpose. This is surely not an achievement which could evoke any great enthusiasm.

The Finance Member is at great pains to show that it is neither reasonable nor even advantageous to make an attempt to raise tax revenue sufficiently to meet the original provision. He gives an elaborate review of the position as regards the public debt, credit and currency reserves and his object is to underline his conclusion that the financial position of the Government has been so strengthened that it is not necessary to strain the tax revenue in order to meet the provision for the reduction or avoidance of debt at the full level fixed by the convention of 1924. Having decided on this change, Sir George has no difficulty in stating the next stage in this facile process ; and the next stage is that the change should have retrospective effect, that is, it will also be applicable to 1933-34.

In spite of the elaborate pleading and despite the rosy picture of Government finances which Sir George has painted and with a good part of which we are also in agreement, we cannot but think that this summary alteration of the 1924 convention is nothing more and nothing less than a "raid on the sinking fund."

After providing Rs. 3 crores for debt reduction, the revised estimates for 1933-34 show a surplus of Rs. 1.29 crores. The

Finance Member proposes to set aside this sum as a special fund to cover relief measures in respect of earthquake damage.

We may now turn to the budget estimates of 1934-35. Basing his assumptions on the net figures of revenue and expenditure, Sir George expects that the budgetry position would be Rs. 2.80 crores worse than that revealed in the revised estimate of 1933-34. It has already been pointed out that the revised figures for 1933-34 are expected to show a surplus of Rs. 1.29 crores. Sir George has had, therefore, to find means of improving the position to the extent of Rs. 1.53 crores if he was to provide an even balance for 1934-35.

At this stage, we must refer to the new taxation proposals.

(1) Sir George proposes an excise duty of Re. 1-5-0 per cwt. on factory-produce sugar in India. This is expected to yield Rs. 1.47 crores, of which Rs. 7 lakhs is to be placed at the disposal of the sugar-producing provinces for assisting the organisation and operation of co-operative societies among the cane-growers so as to help them in securing fair prices, or for other purposes directed to the same end.

(2) There is to be a slight increase in the duty on raw tobacco and a reduction in the duty on cigarettes. The Finance Member calculates that the combined effect of these two alterations would be to increase by about Rs. 30 lakhs the very reduced revenue which must otherwise be anticipated.

(3) Import duty on silver is to be reduced from 7½ as. per ounce to 5 as. per ounce. This is to result in an increase of Rs. 5 lakhs in the estimates.

(4) The export duty on hides, which now stands at 5 per cent., is to be abolished, while the export duty on skins will continue. The loss of revenue on this account would be Rs. 5 lakhs.

(5) The postage on post-cards is to continue at the present level of nine pies. The initial weight of inland letters is to be reduced to ½ tola and the charge is to be one anna. For heavier letters, the charges will continue to be 1¼ as. for letters not exceeding 2½ tolas, with additional 1¼ as. for successive weights of 2½ tolas or fractions. As regards ordinary telegrams, it is proposed to impose a minimum charge for a telegram of 8 words, for nine annas while that for an express telegram of the same length will be Re. 1-2-0. For additional words, the present charges will be applicable. The re-organisation of the rates will mean a loss of Rs. 27.34 lakhs which is to be made up by a raid on the Depreciation Fund of this department. These proposals, namely, Sugar Excise net revenue Rs. 1,40 lakhs, Tobacco duties Rs. 30 lakhs, Silver Rs. 4 lakhs, less the loss of Rs. 5 lakhs on the abolition of the export duty on raw hides, should produce a net improvement in revenue of Rs. 1,69 crores, which will cover the deficiency of Rs. 1,53 crores and leave a small surplus of Rs. 16 lakhs.

It will be seen from the above that the complexion of our financial affairs has been improved almost solely by the changes effected in regard to the provision for the Sinking Fund. The Railways, too, are under a similar necessity of having to present the financial position in a better light only with the aid of a re-examination of the policy underlying the payments into, and the withdrawals from, the Depreciation Fund. Before going into it, it would be well to have a brief resume of the results of the working of the Railways during this trying period. It is well known that up to 1929-30 the Indian Railways were yielding a surplus. 1930-31 was the first deficit year in the post-Separation period. The five years ending March 31, 1935, will present a total deficit of Rs. 37.70 crores. 1932-33 resulted in a realised deficit of Rs. 10.23 crores. The revised estimates for 1933-34 put the deficit of the year at Rs. 7.78 crores and the Budget Estimates for 1934-35 showed a deficit of Rs. 5.30 crores.

While such results are, indeed, disheartening, especially when set in contrast with the earlier years of the Separation period, the exact position of the Indian Railways can hardly be understood unless adequate consideration is paid to the position of the Depreciation Fund. In the speech on the Railway Budget, both Sir Joseph Bhore in the Assembly and Sir Guthrie Russell in the Council of State, were at great pains to emphasise the fact that an application of the normal criteria of sound business will show the Railways to be a good investment proposition, and that even the heavy deficits of these years has left the position of the Railways essentially sound. For as Sir Joseph Bhore urged the Railways have been providing every year for a depreciation of Rs. 13 crores during each of the deficit years and that the accruals in the Depreciation Fund have considerably exceeded the withdrawals from that Fund during these years. The position in this regard is best elucidated in the following paragraph from the Explana-

tory Memorandum attached to the Railway Budget:—

> "In addition, they have set apart from current revenues during all these years, including not only the first six fat years but also the next five lean years, an amount calculated to represent the depreciation on wasting assets during the year. The amount thus set apart has every year exceeded considerably the actual amount required to be withdrawn from the fund for that part of the cost of renewals and replacements carried out during the period which, under the rules of the fund, is debitable to it. The total appropriations to the depreciation reserve fund in the eleven years beginning with 1924-25 amount to Rs. 1,35 crores whereas the sums withdrawn are expected to amount to Rs. 95 crores. It is this balance of Rs. 39 crores which has enabled railways to meet their deficits without outside borrowing."

It is, indeed, no small achievement that during such a trying period a vast commercial enterprise like the Indian Railways should have been able to meet the inevitable heavy deficits from their own resources. But there is something disquieting in the fact that in situations of this kind it will be possible for the authorities to brighten the situation by a claim to having made extravagant provisions for depreciation in the past. While extravagant provisions may well result in a welcome nest's egg, it is also a confession of a none too wise financial policy in the past. That is, both in the Railways and the Central finances, the authorities had been taking more by way of taxes and freights than was necessary for the upkeep of the system. It seems as though the Government were anxious during the fat years to resist the demand for reduction of rates or popular expenditure with the plea of provision for Depreciation Fund and saving their faces during a depression period by urging that there were extra provisions in the Sinking or the Depreciation Funds. Whatever this might be, it is high time that an attempt should be made to determine scientifically the exact contributions necessary for the Depreciation Fund and to relieve trade of the unduly heavy burden which had been imposed on it during the past.

We may now turn to make a short summary of the main results disclosed in the Railway Budget. Here it is important to note that owing to a change in the form of the estimates, a comparative study of the three years covering the budget speech has been rendered somewhat difficult. The change is in reference to the inclusion of receipts and expenditure of lines belonging to private companies or Indian States but worked by the Indian State Railway Systems for a percentage of the gross earnings. The practice hitherto followed and the objections thereto are thus explained by Sir Joseph;

> "The practice hitherto followed was to deduct both the receipts and expenditure of these lines from the total receipts and expenditure of the system by which they were administered. This procedure, as pointed out by Sir Arthur Dickinson, is fundamentally wrong in principle as the officials of a railway system are engaged in operating all the lines comprising that system, including these worked portions, and the statistics and accounts should properly be based on the total receipts and expenditure of the entire system."

Without taking note, for purposes of comparison, the effect of the new method, the position is that the actuals for 1932-33 show gross traffic receipts at Rs. 84.43 crores and total expenditure (including Depreciation) at Rs. 62.85 crores; the revised estimates for 1933-34 show total receipts at Rs. 86.50 crores and total expenditure at Rs. 63.04 crores; and the budget estimates for 1934-35 anticipate total receipts at Rs. 91¼ crores and total expenditure at Rs. 64½ crores. The nett traffic receipts, thus, show a progressive increase from Rs. 21½ crores in 1932-33, which was the lowest since the separation of Railway finance from general finance, to over Rs. 28 crores in 1934-35. After sundry adjustments, the nett revenue is as follows: Rs. 22.68 crores in 1932-33, Rs. 24.62 crores in 1933-34 and Rs. 26.75 crores in 1934-35. While there has been a satisfactory expansion in revenue, the next item of importance on the expenditure side, which is "interest charges," has been on a slightly lower grade, due to the reduction of the borrowing rate for the Government of India. Interest charges accounted for Rs. 32.91 crores in the actuals of 1932-33, while revised estimates provide only for Rs. 332.40 crores for 1933-34 and the budget estimate for 1934-35 anticipated a further reduction to Rs. 32.05 crores.

Statement of the Receipts and Disbursements of the Central Government, in India and in England

(In Thousands of Rupees)

	Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27		Accounts, 1927-28	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Principal Heads of Revenue—												
Customs	40,64,03	...	38,98,28	...	44,98,19	...	46,96,18	...	46,56,84	...	47,36,60	...
Taxes on Income	17,54,85	...	17,60,88	...	15,41,10	...	15,27,21	...	15.03,21	...	14,40,83	...
Salt	5,31,10	...	8,65,39	...	6,18,84	...	5,07,91	...	5,49,85	...	5,36,67	...
Opium	1,92,32	...	1,66,02	...	1,44,19	...	2,03,52	...	3,32,69	...	3,07,52	...
Other Heads	1,65,10	...	2,13.47	...	1,63,19	...	1,52,03	...	1,60,98	...	1,75,00	...
TOTAL ...	67,07,40	...	69,04,04	..	69,65,51	...	70,86,85	...	72,03,57	...	71,96,62	...
Forest and other Capital outlay Charged to Revenue	...	...	...	...	...	17,32	...	7,18	...	7,83	...	12,58
Irrigation	...	2,85	...	5,88	...	11,44	...	8,12	...	5,25	...	8,33
Railways	1,21,99	...	6,44,21	...	6,78,42	...	5,49,04	...	6,01,13	...	6,27,83	...
Posts and Telegraphs	45,31	...	70,75	...	80.37	...	1,88,25	...	...	5,18	...	47,28
Debt Services	...	15,00,19	...	14.16,85	...	15,27,23	...	14,12,29	...	12,65,90	...	11,99,23
Civil Administration	...	9,49,97	...	8,65,46	...	9,38,61	...	9,86,51	...	10.27,39	...	10,22,09
Currency and Mint	2,58,93	...	2,13,67	...	3,27,92	...	3,93,78	...	3,39,14	...	1,89,79	...
Civil Works	...	1,20,43	...	1,33,26	...	1,64,52	...	1,47,57	...	1,73,95	...	1,42,41
Miscellaneous	...	4,58,09	...	3,51,72	...	3,89,42	...	3,71,42	...	3,36,15	...	3,22,85
Military Services	...	65,26,80	...	56,22,76	...	55,63,40	...	55 99,86	...	55,96,96	...	54,79,45
Provincial contributions and Miscellaneous adjustments between Central and Provincial Governments	9,22,49	...	8,83,56	...	8,74,47	...	6,08,41	...	5,13,23	...	2,60	...
Extraordinary Items	...	...	...	81.30	2,53,51	...	37,80	...	...	2,39,11	2,17,38	...
GRAND TOTAL ...	80,56,57	95,58,33	87,16,23	84,77,23	91,80.20	86,11,94	88,64,13	85,32,95	86,57,07	86,57,07	82,34,22	82,34,22

Statement of the Receipts and Disbursements of the Central Government, in India and in England—(*Contd.*)

(In Thousands of Rupees)

	Accounts, 1928-29		Accounts, 1929-30		Accounts, 1930-31		Accounts, 1931-32		Accounts, 1932-33		Revised, 1933-34		Budget, 1934-35	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Principal Heads of Revenue—														
Customs	48,34,42	...	50,30,15	...	45,87,37	...	45,53,17	...	51,02,23	...	45,87,92	...	46,75,42	...
Taxes on Income	16,01,38	...	15,98,76	...	15,25,61	...	16,74,89	...	17,19,81	...	16,30,08	...	16,39,97	...
Salt	6,36,67	...	5,49,50	...	5,56,80	...	7,42,24	...	8,95,84	.	7,40,74	...	7,57,92	...
Opium	2,71,64	...	2,55,28	...	1,78,91	...	1,27,64	...	5,99	...	87,06	...	52,79	...
Other Heads	1,62,48	...	1,62,25	...	1,39,03	...	1,61,45	..	1,27,10	...	1,26,54	...	1,20,99	...
TOTAL ...	75,06,59	...	75,95,94	...	69,87,72	...	72,59,39	...	78,50,97	...	71,72,34	...	72,50,09	...
Forest and other Capital outlay charged to Revenue ...	...	3,62	...	5,13	. .	4,02	...	66	...	2,37	...	1,46	...	1,46
Irrigation	...	12,85	...	20,02	...	30,73	...	8,72	...	3,76	...	3,97	...	5,92
Railways	5,23,19	...	6,11,86	...	5,73,57	...	...	...	...	...	...	...	...	...
Posts and Telegraphs ...	...	74,22	...	81,18	...	1,55,37	...	41,71	...	46,46	...	55,43	...	18,54
Debt Services	. .	12,82,41	...	12,18,07	...	14,03,71	...	17,31,44	...	16,58,00	...	11,07,00	...	11,47,30
Civil Administration ...	...	10,42,58	...	11,49,32	...	12,36,93	...	11,23,11	...	8,82,11	...	8,81,20	...	8,80,34
Currency and Mint ...	2,16,71	...	1,99,48	...	27,34	...	1,02,52	...	1,64,96	...	62,46	...	60,63	...
Civil Works	...	1,42,24	...	2,35,62	...	2,35,47	...	1,96,26	...	1,53,79	...	1,82,86	...	1,78,10
Miscellaneous	...	3,16,45	...	3,50,02	...	3,34,43	...	2,77,24	...	3,30,29	...	3,56,87	...	3,75,37
Military Services	...	55,10,00	...	55,10,00	...	54,30,00	...	51,76,00	...	36,74,00	...	44,42,47	..	44,38,00
Provincial contributions and Miscellaneous adjustments between Central Provincial Governments ...	2,92	...	3	...	...	...	...	...	...	96,05	...	1,00,00	...	2,52,44
Extraordinary Items ...	1,03,42	...	1,88,88	...	83,58	...	18,50	..	...	13,90	...	1,03,57	...	3,10
GRAND TOTAL ...	83,52,83	83,84,37	85,96,19	85,69,86	76,72,21	88,30,66	73,80,41	85,55,14	80,15,93	78,60,74	72,34,80	72,34,80	73,10,72	73,00,57

Abstract Statement of the Receipts and Disbursements of the Central Government, in India and in England

(In Thousands of Rupees)

	Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27		Accounts, 1927-28	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Surplus or Deficit	...	15,01,76	2,39,20	...	5,68,25	...	3,31,18	...	...	...	...	...
Capital Accounts—												
Capital outlay on Security Press ...	...	...	...	...	...		...	16,40	...	16,50	...	—9,77
Railway Capital not Charged to Revenue	28 27	18,43,42	...	21,82,93	...	13,95,24	...	22,72,70	...	29,85,93	...	33,14,99
Payment for discharge of Railway Debentures	...	63,34	...	...	...	...	...	...	...	...	...	...
Construction of Irrigation Works...	...	2,25	...	13	...	96	...	—97	...	—70	...	7
Capital outlay on Posts and Telegraphs	...	65,62	...	75,21	...	1,17,36	...	2,23,54	...	32,50	...	46,88
Capital outlay on Vizagapatam Port	...	...	...	...	...	...	...	64,77	...	31,86	..	29,05
Capital outlay on Lighthouses and Light Ships	...	...	..	...	...	...	..	..	..	.	...	...
Currency Capital outlay ...	...	...	...	...	..	...	...	...	...	8,66	...	12,95
Initial Expenditure on New Capital at Delhi	...	1,84,80	...	1,54,74	.	1,42,19	...	99,06	...	61,63	...	46,58
Payment of commuted value of Pensions	...	...	...	...	...	..	...	..	...	28,85	...	44,26
Capital outlay on Bombay Land Scheme	...	...	...	...	...	...	...	...	...	...	...	20,74
Payments to Retrenched Personnel	...	...	...	...	...	...	...	...	...	...	...	...
Debt Deposits Advances and Remittances—												
Permanent Debt	66,22,99	...	37,13,70	...	11,74,77	...	...	4,03,35	3,31,66	...	4,38,88	...
Floating Debt	...	40,61,80	...	19,46,70	...	2,11,80	...	25	...	8,18,00	...	1,94,60
Unfounded Debt	2,96,51	...	9,80,07	...	8,96,12	...	13,45,51	...	12,72,14	...	11,86,68	...
Deposits and Advances ...	17,82,39	...	7,19,17	...	2,32,84	..	15,54,74	...	23,73,26	...	12,89,97	...
Loans and Advances by Central Government	20,42	...	...	3,25	...	1,22,69	...	8,92,45	...	5,88,77	...	7,77,48
Loans between Central and Provincial Governments ...	...	9,59,53	...	10,12,12	...	8,86,61	...	..	...	...	...	...
Remittances	37,92	...	...	70,67	1,18,36	...	..	85,91	1,21,88	...	19,22	...
Balances of Provincial Governments	6,35	...	3,67,86	...	2,64,95	...	3,20,25	...	...	4,35,26	...	4,78
Opening Balance	34,65,67	...	35,78,00	...	41,52,05	...	45,25,29	...	40,19,51	...	32,18,88	...
Closing Balance	...	35,78,00	...	41,52,05	...	45,25,29	...	40,19,51	...	31,11,10	...	16,70,97
	1,22,60,52	1,22,60,52	95,97,80	95,97,80	74,02,34	74,02,34	80,76,97	80,76,97	81,18,45	81,18,45	61,53,58	61,53,58

Abstract Statement of the Receipts and Disbursements of the Central Government, in India and in England—(*Contd.*)

(In Thousands of Rupees)

	Accounts 1928-29		Accounts 1929-30		Accounts 1930-31		Accounts 1931-32		Accounts 1932-33		Revised Estimate 1933-34		Budget Estimate 1934-35	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Surplus or Deficit ...	..	31,54	26,83	...	..	11,58,45	...	11,74,73	1,55,19	...	...	...	...	..
Capital Accounts—														
Capital outlay on Security Press	...	−4,76	...	23	...	4,02	...	−3,82	...		...	−1,11	...	−1,15
Railway Capital not charged to Revenue	15	29,35.07	2,44	30,18,34	...	13,20,87	...	6,75,63	...	—72,57	...	45,23	...	4,68,00
Payment for discharge of Railway Debentures ...	...	...	...	...	...	...	..	...	..	...	...	...	..	...
Construction of Irrigation Works ...	...	36	...	2,09	...	27	...	9	...	...	...	...	...	...
Capital outlay on Posts and Telegraphs	...	53,33	...	33,07	...	−3 08	...	87,92	...	14,82	...	15,69	...	39,70
Capital outlay on Vizagapatam Port	...	29,23	...	35,75	...	38,73	...	36,48	...					
Capital outlay on Lighthouses and Light Ships ...	...	..	...	13	...	−13	...	...	..	52,42	...	49,50	...	18,46
Currency Capital outlay ...	...	3,37	...	9	...	1,35	..	−6	..	−3,83	...	−4,14	...	...
Initial Expenditure on New Capital at Delhi ...	...	36,65	...	72,72	..	48,27	...	11 61	...	...	...	10,00	...	−85
Payment of commuted value of Pensions	...	52,09	...	38,69	...	42,06	...	42,32	..	78,89	...	85,47	...	67,67
Capital outlay on Bombay Land Scheme ...	...	...	...	...	..	2,10,37	...	...	...	...	..	...	...	49,56
Payments to Retrenched Personal	...	...	...	...	...	...	...	1,45	..	12,83	...	2,90	...	−3,36
Debt Deposits Advances and Remittances—														
Permanent Debt ...	23,01,91	...	20,39,57	.	14,97,34	...	...	47,89	22,71,74	...	...	5,86,57	...	12,41,30
Floating Debt	3,62,25	...	30,10,65	..	...	6,39,89	9,03,76	...	...	15,12,65	...	13,82,20	...	..
Unfunded Debt ...	8,40,65	..	13,01,22	...	5,78,41	...	10,18,08	...	20,09,74	...	22,45,62	...	...	...
Deposits and Advances ...	3,17,90	...	...	2,81,63	...	9,56,15	...	4,58,61	50,96	..	...	3,67,32	17,65,33	...
Loans and Advances by Central Government ...	...	12,72,24	...	7 29,11	...	10,97 02	...	12,62,18	...	6,91,63	...	3,96,65	5,34,26	...
Loans between Central and Provincial Governments	...	...	...	...	...	...	...	...	...	66,90	...	19,60	...	7,48,95
Remittances	75,66	...	...	51,12	6,15	...	...	1,22,07	...	...	...	32,09	3,14	...
Balances of Provincial Governments ...	...	56,84	...	3,70,76	...	7,07,63	...	1,59,68	2,59,82	...	...	...	...	25,00
Opening Balance ..	16,70,97	...	16,19,83	...	34,27,91	...	24,68,67	...	33,81,43	...	27,78,33	...	20,54,19	...
Closing Balance ...	...	16,19,83	...	34 27,91	...	24,68,67	...	33,84,43	...	27,78,33	...	20,54,19	...	17,10,84
	60,69,79	60,69,79	80,03,54	80 03,54	87,10,01	87,10,01	74,90,51	74,90,51	81,1,88	81,31,88	50,23,95	50,23,95	43,67,12	43,67,12

Accounts of the Revenue of the Government of Madras Since 1922-23

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	...	10,82	1.57	4,27	4.61	5.94	5.48	7.27	6,75	...	...	...	...
Land Revenue ..	6,09,21	5.86,78	6,15,06	6,39,79	6.22,00	6.23,77	5.24,89	5,21.66	4,88.62	5.32,73	5,02,57	7,03,41	7,25,13
Excise ...	4,90.14	5.18,87	4.90.14	4,94.35	5.10.33	5,34,37	5,58.76	5.92.26	5.24,28	4,25,80	4,26,96	4.32,72	4,31,68
Stamps ...	2.19,84	2.34,05	2,11.56	2.45.08	2.52.50	2,50.11	2.51,17	2,50.92	2.34.71	2,34.93	2,41,58	2,29,81	2,29,78
Forest ...	52.73	54.16	55,74	51.81	56,24	53.44	61,55	65,56	52.69	45,32	49,72	43,11	42,85
Registration ...	35,98	36,86	37,90	38,61	40,53	39,06	34.12	35,58	31,30	30,73	33,49	31,21	31,20
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	14,07,90	14,41,54	14,41,92	14,73,91	14.86.24	15.06.69	14,35,97	14,70,65	13,38.35	12,69,51	12,54.32	14,40,26	14,60,64
Railways ...	...	...	...	...	..	...	...	...	...	...	...	...	...
Irrigation ...	94,70	1,02,34	88,74	96.35	91.27	86.62	1,83,41	1,88,65	1,86,01	1,91,62	2,09,07	−37,67	7,86
Interest Receipts ...	9,53	11.18	12.89	16.21	20,86	25.17	34,27	40,88	42,52	30,76	29,66	35,12	27,13
Civil Administration ...	71,40	63,75	61,51	60,81	60,25	63.78	68,62	74,91	72,17	98,02	1,08,36	1,00.80	1,07,83
Civil Works ...	7.56	6,62	5,92	9,67	8.37	9.25	13,06	11.52	24,89	22,46	20,55	21,03	23,98
Miscellaneous ...	11.58	13,27	15,54	18.09	16,69	13,85	17,69	22,13	19.95	17,48	18.27	16,84	16,19
Contribution to the Central Government by Provincial Government	−3,48.00	−3,48.00	−3,48.00	−2,21.98	−1,65.19	...	...	...	...	...	...	...	...
Miscellaneous adjustment between Central and Provincial Governments (net)	3,08	8,68	60	38	...	−5,51	...	..	...	...	...	...	...
Extraordinary Receipts...	...	...	...	17.90	...	.	.	...	...	...	...	...	...
Transfers from Revenue Reserve Fund ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India ...	12,57,75	12,99.38	12.79,03	14,71.34	15,18.49	16,99,85	17,53,02	18.08,77	16,83,89	16,29,85	16,40,23	15,76,38	16,43,63
Revenue in England with Exchange	...	...	...	1	1	1	9	10	4	3	2	...	...
TOTAL REVENUE ...	12,57,75	12,99.38	12,79,03	14,71.35	15.18,50	16,95,98	17,53,11	18,08,87	16,83,93	16,29,88	16,40,25	15,76,38	16,43,63

Expenditure—Government of Madras Since 1922-23

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax ...	..	...	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	1,33,16	40,39	37,22	38,15	38,96	39,16	40,73	28,39	28,15	25,31	19,89	19,60	19,16
Excise ...	29,02	27,93	26,62	17,12	42,19	12,96	[illegible]	45,19	46,28	36,57	33,24	33,40	34,15
Stamps ...	6,01	5,27	5,52	5,82	5,75	6,25	6,71	7,07	5,96	6,06	6,35	6,01	6,20
Forests ...	47,69	16,06	39,22	12,38	14,32	12,81	41,[illegible]	13,81	42,50	38,36	38,59	35,56	35,02
Registration ...	21,93	22,64	23,84	24,75	25,78	24,71	27,44	23,35	29,31	28,17	26,67	29,01	29,40
Scheduled Taxes ...	...	...	...	...	...	...	..	..	...	...	...	...	...
TOTAL ...	2,33,81	1,12,29	1,32,22	1,38,02	1,37,36	1,27,02	[illegible]	[illegible]	1,72,80	1,31,37	1,25,07	1,23,58	1,28,99
Forest and other Capital outlay charged to Revn. .	...	...	2,31	4,18	5,18	5,38	1,77	1,31	1,67	2,98	6,13	2,38	2,78
Railways ...	...	...	..	...	..	...	...	..	..	...	...	...	..
Irrigation ...	73,38	76,58	80,30	88,34	[illegible]	97,34	1,05,82	1,08,71	1,27,17	1,32,15	1,26,88	50,73	50,90
Debt Services ...	8,16	6,00	28,11	40,24	15,18	[illegible]	[illegible]	58,23	[illegible]	17,45	11,79	97,99	93,99
Civil Administration ...	7,34,52	8,16,19	8,44,02	8,61,81	[illegible]	9,24,89	10,08,18	10,15,41	[illegible]	10,16,18	[illegible]	10,13,61	10,15,93
Civil Works ...	1,01,51	99,04	77,19	[illegible]	1,10,36	1,10,27	1,35,75	[illegible]	[illegible]	[illegible]	1,58,09	1,58,25	1,40,97
Miscellaneous ...	78,87	85,57	81,00	91,93	[illegible]	78,15	83,07	86,93	95,13	88,83	1,13,00	88,83	79,93
Extraordinary Items ...	...	...	22,02	...	..	...		...	.	.	.	...	..
Total Expenditure in India ...	12,29,45	12,28,17	12,68,97	13,29,64	13,71,60	14,54,64	15,68,77	16,35,87	17,13,14	15,81,70	15,24,71	15,35,54	15,41,42
Expenditure in England with Exchange ...	31,32	34,90	39,53	42,95	45,83	41,19	45,20	48,91	46,55	42,77	38,33	40,22	43,17
TOTAL EXPENDITURE ...	12,60,77	12,63,07	13,08,50	13,72,99	14,17,02	14,98,13	16,13,97	16,84,78	17,59,69	16,24,17	15,63,04	15,75,76	15,84,59

Revenue—Government of Bombay

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	3,00	...	...	...	...	...	...	...	...	...	...	...	..
Salt ...	...	...	..	...	...	...	...	...	...	17	19	6	...
Land Revenue ...	5,58,69	5,08,89	5,16,53	5,41,11	4,66,94	5,25,19	4,84,68	4,79,63	4,74,45	5,01,34	4,71,24	4,82,99	4,77,98
Excise ...	4,22,79	4,34,59	4,42,98	4,15,33	4,09,39	3,96,21	3,92,26	4,07,89	3,04,35	3,26,55	3,50,85	3,55,53	3,52,71
Stamps ...	1,76,62	1,79,89	1,78,06	1,76,35	1,67,58	1,73,40	1,68,39	1,77,15	1,58,06	1,50,28	1,58,96	1,58,50	1,56,00
Forest ...	70,37	71,50	73,08	75,28	76,56	72,94	73,43	79,75	52,24	56,74	59,71	54,26	48,30
Registration ...	13,03	12,87	12,49	12,78	12,04	11,82	11,75	12,33	10,89	11,36	12,54	16,20	16,20
Scheduled Taxes ...	2,66	9,40	9,04	15,30	19,55	21,20	21,52	20,21	16,39	19,19	18,77	17,42	18,50
TOTAL ...	12,47,16	12,17,14	12,32,18	12,36,15	11,52,06	12,00,76	11,52,03	11,76,87	10,16,38	10,63,63	10,72,06	10,84,96	10,69,69
Railways ...	...	...	...	..	..	...	...	...	...	...	...	...	...
Irrigation ...	53,27	51,02	53,28	42,11	49,24	42,94	65,72	46,80	33,12	58,40	71,73	68,20	56,88
Interest Receipts ...	80,07	1,02,92	1,32,67	1,65,80	1,68,13	1,58,27	1,31,52	1,43,86	1,47,23	1,44,87	1,47,69	1,42,69	1,39,83
Civil Administration ...	52,80	56,36	53,37	57,77	59,10	56,04	76,91	82,51	89,77	95,49	1,00,83	1,02,15	99,31
Civil Works ...	16,36	17,89	15,42	16,13	16,39	34,70	38,71	52,93	53,06	72,53	62,04	58,20	59,82
Miscellaneous ...	23,95	32,85	27,74	30,67	34,54	33,82	38,87	82,93	33,92	35,43	44,99	57,06	55,59
Contribution to the Central Government by Provincial Governments	−56,00	−56,00	−56,00	−34,00	−28,00	...	...	...	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial Governments (net) ...	−39	27,64	40,52	9,55	4,03	4	−4,00	−4	...	...	...	...	...
Extraordinary Receipts...	...	..	.	...	2,58	7,91	1,96	3,56	7,06	9,60	25,75	35,10	41,70
Transfer from Revenue Reserve Fund ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India...	14,17,22	14,52,82	14,99,18	15,24,18	14,58,07	15,34,48	15,21,72	15,91,42	13,80,54	14,81,95	15,25,09	15,47,98	15,22,82
Revenue in England with Exchange ...	−2	...	...	...	...	..	2	11	32	9	8	5	1
TOTAL REVENUE ...	14,17,20	14,52,82	14,99,18	15,24,18	14,58,07	15,34,48	15,21,74	15,91,53	13,80,86	14,82,04	15,25,17	15,48,03	15,22,83

Expenditure—Government of Bombay.

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	1,66,81	1,82,13	61.99	63,98	65,51	66,48	64,77	66,08	64,93	69,86	66,76	62,69	62,72
Excise	32,51	35,28	40,15	54,03	63,92	47,94	46,32	44,25	41,68	39.61	46,78	49,10	47,42
Stamps	3,59	3,38	43	1,26	1,75	1,32	2,67	2,65	2,42	2,34	2,42	2,45	2,30
Forest	39,47	43,33	42,69	40,54	40,94	40,58	41,25	43,27	40,65	40,06	35,13	33,71	32,71
Registration ...	7,40	6,63	6,75	6,63	6,64	6,53	6,55	6,64	6,38	6,29	6,02	6,09	6,09
Scheduled Taxes ...	...	18	18	81	19	20	20	21	21	31	24	30	28
TOTAL ...	2,49,78	2,70,93	1,52,19	1,66,62	1,78,95	1,63,05	1,61.76	1,63,10	1,56,27	1,58,47	1.56,35	1,54,34	1,51,52
Forest and other Capital outlay Charged to Revenue	...	...	...	2,03	2,22	2,43	2,33	2,22	1.76	58	1,10	72	59
Railways	...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation	72,51	1,00,04	91,35	94,05	95,50	1,05,20	99,05	1,12,24	99,73	86.04	1,07.66	1,24,20	1,25,14
Debt Services ...	1,09,15	1,55,07	2,01,91	2,76.99	2,49.81	2,25,38	2,18,31	2,13,73	1,89,28	2,30,51	2,29,23	2,32,93	2,14,12
Civil Administration ...	6,40,39	6,40,65	7,62,81	7,87,55	7,85,75	7,85,77	8,05,22	8,26,10	8,33,65	8,05.31	7,50,39	7,58,61	7,60,42
Civil Works ...	1,01,77	96,81	90,77	90,28	1,20,84	1,47,35	1,45,96	1,40,26	1,54,41	1,13,32	93,40	1,00,38	94,07
Miscellaneous ...	1.50,11	1,27,08	1,40,38	1,56,21	1,46,89	96,58	80,60	82,63	87,42	93,76	1,18,05	1,28,29	1,35,10
Extraordinary Items ...	...	...	...	...	...	...	...	...	...	2	3·24	2·91	1·15
Total Expenditure in India	13,23,71	13,90,58	14,39,41	15,73,73	15,79.96	15,25,76	15,13,28	15,40,28	15,22,52	14,88,31	14,59,42	15,02,38	14,82,11
Expenditure in England with Exchange ...	29,46	32,87	33,16	41,79	43,71	37,50	42,37	40,52	39,39	41,08	39,53	41,79	40,04
TOTAL EXPENDITURE ...	13,53,17	14,23,45	14,72,57	16,15,32	16,23.67	15,63,26	15,55,60	15,80,80	15,61,91	15,29,39	14,98,95	15,44,17	15,22,15

Revenue—Government of Bengal

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
Taxes on Income ...	..	..	...	...	...	...	...
Salt	...	...	...	...	...	...	...
Land Revenue ...	3,12,62	3.13.02	3.10.71	3.00,57	3.11.18	3.15.12	3.26.76
Excise	2.01.10	2.09.85	2.15.67	2.26.03	2.25,17	2.21.31	2.24,91
Stamps	3.02,24	3.16.75	3.34.68	3,37.68	3.31.60	3.46.81	3.51.88
Forest	23.11	22.61	24.75	28.37	31.24	33.42	31.18
Registration	21,67	21 19	25.85	34.02	38,30	40,17	39,94
Scheduled Taxes ...	25.12	23.73	21.52	19.81	16.91	19.47	16.99
Total ...	8,88.86	9.10,45	9,31.61	9.78.88	9,51.60	9.78,37	9,91.03
Railways	...	98	93	81	1.24	2.45	1,02
Irrigation	29	3.14	3.40	11	45	—1.22	—1,19
Interest Receipts ...	2,77	3,12	3,18	3.19	1.11	6.20	6.24
Civil Administration ...	57,84	68,50	61.54	62.45	64.03	68,86	77,35
Civil Works	7,74	5,85	6.57	5.82	6,63	6.61	5.51
Miscellaneous ...	27,91	22,18	21,41	23.62	20.20	18.81	12.90
Contribution to the Central Government by Provincial Govts.	...	...	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial Govts.	—43	3	2.03	...	...	1.59	...
Extraordinary Receipts	...	...	...	...	...	2.11	19
Transfer from Revenue Reserve Fund ...	...	...	...	...	...	...	...
Total Revenue in India	9,84,98	10,13,16	10,34,37	10,70,18	10.50.66	10.81.30	10,97,01
Revenue in England with Exchange ..?	—2	...	—13	—1	—30	—1	1.66
TOTAL REVENUE ...	9,84,96	10,13,16	10,31,24	10,70,17	10,50,36	10,81.29	10.98.67

	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	...	...	...	...	...	...
Salt	...	...	5.37	6.01	2,00	2,00
Land Revenue ...	3.24,71	3.08,93	3,06,22	3.00,06	3.18.32	3,15,46
Excise	2,26.25	1.80.16	1,56,00	1,40,32	1.38.45	1.42.00
Stamps	3,91,97	3.12.96	2.71.00	3,13.01	2,83.00	2.94.00
Forest	30.52	23.12	16.94	15.12	14.67	15.26
Registration	31.69	23,72	19.53	18.47	19,06	19,06
Scheduled Taxes ...	16,29	13.00	13,94	11,30	12,50	12,50
Total ...	10.21.46	8,61.88	7,87,99	8,04,52	7,87,91	8,00,22
Railways	1,19	92	76	31	28	35
Irrigation	—2,65	—2,69	—53	—2.30	—51	—3,89
Interest Receipts ...	6.13	4.07	4,30	6,18	4,25	3,98
Civil Administration ...	82.41	71.53	75.24	87,66	88,58	82,78
Civil Works	5.25	10,86	17,35	15.76	15,10	18,82
Miscellaneous ...	17,01	16.15	15.31	21,44	14,23	14,74
Contribution to the Central Government by Provincial Govts.	...	...	..	...	..	...
Miscellaneous adjustments between Central and Provincial Govts.	...	...	...	2,14	...	1,44
Extraordinary Receipts	5,06	2,17	58	2,10	1,37	1,00
Transfer from Revenue Reserve Fund ...	...	...	...	...	...	...
Total Revenue in India	11,35,89	9,65,92	9,01,00	9,38,11	9,06,54	9.19.44
Revenue in England with Exchange ..?	—2	35	6	—7	2	3
TOTAL REVENUE ...	11,35,87	9,66,27	9.01.06	9,38,04	9,06,56	9,19,47

Expenditure—Government of Bengal

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	..	...	...	...	..	...	...	...	...	...	...	...
Land Revenue ...	28,88	28,05	30,82	35,59	38,48	33,45	46,73	45,09	45,36	41,24	37,76	38,41	38,97
Excise	15,37	18,17	12,88	26,04	24,03	23,87	22,03	22,26	21,80	19,55	17,00	17,32	17,24
Stamps	8,57	10,30	9,47	8,68	8,43	8,93	9,00	6,23	5,23	4,10	4,61	4,30	4,95
Forest	12,31	12,45	14,02	12,34	13,90	14,40	15,78	15,47	15,17	14,96	14,48	14,27	14,48
Registration	17,37	17,79	18,08	18,73	18,76	20,71	20,25	22,13	19,95	18,94	17,47	17,37	17,21
Schedule Taxes ...	20	16	15	15	15	15	15	15	16	15	15	5	5
TOTAL ...	82,90	81,90	85,42	1,01,53	1,04,65	1,06,51	1,14,84	1,11,33	1,07,67	98,94	91,47	91,72	92,90
Forest and other Capital outlay charged to Revenue	...	...	...	43	3,23	2,62	1,04	1,17	78	1,64	61	34	29
Railways	...	...	...	...	...	...	..	...	...	..	...	...	...
Irrigation	7,98	54,54	35,80	30,89	35,12	35,17	36,92	34,13	30,73	29,02	28,75	31,80	34,69
Debt Services ...	−7,92	−6,32	−8,38	−8,48	−7,44	−7,17	−7,92	−1,68	23	1,10	13,49	9,80	14,12
Civil Administration ...	6,82,96	6,55,87	6,69,13	6,80,43	7,07,21	7,09,72	7,29,86	7,54,92	7,73,99	7,50,18	7,24,12	7,45,48	7,47,71
Civil Works	1,00,98	92,81	95,30	1,10,12	1,11,37	1,01,06	97,32	94,54	1,01,49	88,43	76,25	81,30	94,03
Miscellaneous ...	66,86	71,98	68,00	79,10	75,49	97,74	80,57	97,53	84,29	89,26	91,89	95,57	1,01,45
Extraordinary Items ...	...	...	...	...	...	...	...	...	...	...	...	...	2,50
Total Expenditure in India	9,33,76	9,50,78	9,45,27	9,94,02	10,29,63	10,45,65	10,52,63	10,91,94	10,99,18	10,58,57	10,27,58	10,56,01	10,87,69
Expenditure in England with Exchange ...	25,45	27,17	30,75	36,61	41,32	39,92	37,84	41,70	41,61	41,95	40,25	38,48	41,00
TOTAL EXPENDITURE ...	9,59,21	9,77,95	9,76,02	10,30,63	10,70,95	10,85,57	10,90,47	11,33,64	11,40,79	11,00,52	10,67,83	10,94,49	11,28,69

Revenue—Government of the United Provinces

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	33	...	...	3	...	...	...	71	1,40	...	...	...	...
Salt	...	...	...	...	...	...	..	...	...	9	10	3	3
Land Revenue ...	6,79.53	6,92,22	6,71.08	6,90,25	6,87,97	6,92.56	6,04,38	6,85,33	6,47,99	6,12,41	5,70,76	5,69,65	5,58,52
Excise	1,41.20	1,30,90	1,30,50	1,32,72	1,31,00	1,40,97	1,30,86	1,30,35	1,12,22	1,08,23	1,22,29	1,32,34	1,29,64
Stamps	1,60.70	1,75,41	1,74.40	1,76,46	1,69,29	1,71,37	1,72,70	1,80,65	1,69,67	1,65,96	1,85,44	1,81,06	1,71,80
Forest	83.73	78,56	69,22	64,26	58,29	66,08	61,80	61,80	49,76	45,32	45,98	44,62	43,30
Registration	12.60	12,33	12.49	13,70	13,31	12,92	13,54	13,77	11,98	11,39	13,26	12,95	13,02
Scheduled Taxes ...	...	...	..	...	...	...	...	...	...	...	...	...	...
TOTAL ...	10,78,09	10,84,42	10,57,69	10,77,42	10,59,86	10,83,90	9,83,28	10,72,61	9,93,02	9,43,40	9,37,83	9,40,65	9,16,31
Railways	83	2,09	2,14	2,07	84	2,23	1,87	1,85	1,45	86	1,00	1,00	1,00
Irrigation	85,73	99,06	66,27	85,32	99,35	97,88	84,99	1,27,36	1,09,71	97,61	1,29,13	1,17,59	1,22,53
Interest Receipts ...	22,43	13,55	18,19	12,90	9,23	11,76	10,29	16,92	15,26	13,33	12,64	13,13	14,05
Civil Administration ...	35,73	39,15	41.16	41,96	44,85	47,70	46,65	48,47	49,77	46,46	44,12	43,49	71,19
Civil Works	5.30	5,07	6,48	4.03	3,92	3,84	3,45	3,28	6,78	5,69	3,99	5,63	8,55
Miscellaneous ...	19.96	23,68	46,41	46.33	41,11	38,06	14,25	27,85	20,28	13.96	16,35	17,39	16,36
Contribution to the Central Government by Provincial Governments	–2,40,00	–2,40.00	–2,40,00	–1,83,83	–1,50,85	...	...	...	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial Governments	–1,99	13	1,25	45	–15	67	..	...	...	...	...	...	...
Extraordinary Receipts...	...	...	...	13	30.55	36	...	...	...	...	. .	...	...
Transfers from Revenue Reserve Fund ...	...	..	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India ...	10,06,07	10,31,15	9,99,59	10.86,68	11,38,71	12,86,40	11,44,78	12,98,34	11,96,27	11,21,31	11,45,06	11,38,88	11,49,99
Revenue in England with Exchange	–2	–1	–6	...	...	–2	37	27	46	35	15	...	...
TOTAL REVENUE ...	10,06,05	10,31,14	9,99,53	10,86,68	11,38,71	12,86,38	11,45,15	12,98,61	11,96,73	11,21,66	11,45,21	11,38,88	11,49,99

Expenditure—Government of the United Provinces

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	...	...	...	...	...	...	...	...	...	...	...	...
Salt	...	...	..	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	77,86	80,88	79,46	81.73	85,94	86,62	90,61	92,62	95,52	88.16	73,89	74,71	75,04
Excise	6,51	6,63	6,14	15,09	12,79	13.13	13,41	13,26	12,81	11.30	10.76	11,69	11,87
Stamps	3.26	4,94	4.09	3,12	3.43	3,31	3.75	3,41	3,24	3,13	3,03	3,16	3,13
Forests	61.22	43,19	36.53	26,64	31,68	32.26	31,42	32,53	32,02	27.11	25,98	26,62	27,77
Registration ...	4.63	4.54	4.57	4.75	4,64	4.74	4,90	4,97	4.96	4.68	4,31	4.54	4,57
Scheduled Taxes ...	...	..	..	...	..	...	...	...	.	...	..	...	...
Total	1.53,18	1,40.18	1.30.79	1,41,63	1.38.18	1,40.03	1,44,09	1,46,79	1,48.55	1,34.38	1.17.97	1.20,72	1,22,38
Forest and other Capital outlay charged to Revenue .	...	...	...	35	1,33	1.73	1,01	1,31	74	17	7	7	16
Railways ...	26	22	17	16	17	13	13	13	13	8	8	9	8
Irrigation	52.69	58,62	61.67	71,93	78.63	86,08	1,05,07	94.12	1,02,80	1,05.47	1,07.52	1.09.22	1,11,09
Debt Services... ...	32,96	29.59	29.79	33.09	41.06	39.59	62,28	66,75	89,86	77,31	82.21	46.81	42,63
Civil Administration ...	6,24,96	6,17,06	6.35.83	6.93.63	6.95,09	7,14,99	7,23.30	7.44,56	7,41.69	6,92.80	6,52.99	6,72.16	6,92,88
Civil Works	77,39	75.55	80,26	69,62	67,90	65,74	70.32	50.02	65,64	37.94	44.39	48,58	54,92
Miscellaneous... ...	1.07,18	1,03.13	71.00	63.12	70.38	67.17	82.95	88.41	92.37	91.56	84.49	89,86	87.92
Extraordinary Items ..	...	...	...	...	...	...	...	...	...	...	...	84	76
Total Expenditure in India	10,48,92	10,22.35	10,12.51	10.81,63	10,93,04	11,35.19	11.89.15	11,92,12	12,41,78	11,39.71	10,89,72	10,88,35	11.12,82
Expenditure in England with Exchange ...	22,06	25.15	29,98	35.80	40,76	39,33	39,34	41.08	45,99	43,98	40.21	42,13	42.02
Total Expenditure ...	10.70,98	10,47.50	10,42.49	11.17,43	11,33,80	11,74,82	12.28.19	12,33.20	12,87,77	11,83,69	11,29,93	11,30,48	11,54,84

Revenue—Government of Burma

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	...	38	5.90	8,92	14.31	14.93	12.90	11,40	10.36	3,58	..	...	...
Salt	...	...	...	...	...	...	...	...	...	4,89	4,66	2.07	2,25
Land Revenue ...	4,96.15	4,71,54	5,71,38	5,34,18	5.22,93	5,35 2	5.40,38	5,27,73	2,82,77	5.75,85	3,87,58	4,56,65	4,57,49
Excise	1,11,62	1,19.36	1,16,09	1.23,68	1,32.59	1.23,68	1.33,37	1.26,94	1,07,48	80,29	84,57	79,00	79.57
Stamps	50.56	57,89	62,45	66.59	65.84	70.05	70.65	69.34	59,48	59,11	53,36	47.00	48,09
Forest	1,82.83	1,77,58	1,81,85	2,09,62	2.17,36	2.07.88	1,60,75	1,87,82	1.44.07	1,06,41	87,46	72,61	74,99
Registration ...	5,05	5,30	5,80	6,37	6.39	7,02	6.48	6,40	6.42	7,01	5,02	3,90	3,99
Scheduled Taxes ...	..	...	...	..	...	...	4,57	4,15	3,06	10.95	10,77	10,26	10,61
TOTAL ...	9,46,21	8,32,25	9,43,47	9,49,66	9,50.72	9,59,18	9.28.40	9.35.78	6,13.64	8,48.09	6,33.42	6,70,49	6,76.99
Railways	30	86	−21	10	−2	−1	...	..	...	...	...	...	...
Irrigation	42,08	35.94	39.09	43.58	23.87	31,63	33.41	14.83	19,85	27,80	49,82	34,50	36,84
Interest Receipts ...	6,40	8,49	12,61	13,28	11.68	11.24	11.32	10,50	9.16	9,54	9.87	7,55	4,98
Civil Administration ...	25.46	26.77	34,23	34,53	36.67	41.43	40.48	54,59	52.44	49.65	47,49	49,09	46,02
Civil Works ...	7,59	10.38	13,10	9,26	13.12	21.52	24.11	8.85	16.02	15.01	10.88	12,66	10,70
Miscellaneous ...	5,94	7,63	7.31	5,40	10.02	5.23	7.66	5.20	9.31	9,49	29.06	20,74	20,27
Contribution to the Central Government by Provincial Governments	−64,00	−64.00	−64.00	−44.35	−30.33	.	...	...	...	..	...	...	...
Miscellaneous adjustments between Central and Provincial Government	−2,04	−13	16	−1,39	...	−58	...	...	...	...	...	...	...
Extraordinary Receipts...	...	...	..	8,78	3.20	−61	44	2.62	1.17	24	21	1.19	85
Transfers from Revenue Reserve Fund ...	...	...	..	...	...	..	...	...	...	...	...	...	...
Total Revenue in India ...	8,67,94	8,58,19	9.85,76	10,18,94	10.06,03	10,72.68	10.54.52	10,30,77	7,21,89	9,59,82	7,80.75	7,96,22	7,96,65
Revenue in England with Exchange ...	...	...	...	−12	1	1	3	6	45	25	12	2	...
TOTAL REVENUE ...	8,67.94	8,58,19	9.85.76	10.18,82	10.06.04	10.72.09	10.54.55	10.30.83	7,22.34	9,60,07	7,80.87	7,96.24	7,96,65

Expenditure—Government of Burma

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax ...	...	...	..	...	...	...	...	...	..	...	...	...	...
Lan Revenue ...	50,60	50,85	56,99	67,91	67,61	65,33	64,12	61,78	53,33	60,40	52,40	54,34	53,04
Excise	19,70	17,45	17,82	30,69	22,18	22,18	22,98	22,59	24,20	21,14	18,96	18,44	18,31
Stamps	1,45	1,34	1,43	1,39	1,50	1,78	1,76	1,59	1,39	1,29	1,25	1,17	1,09
Forest	98,37	99,72	92,96	77,05	79,08	75,01	60,13	65,04	64,03	−18,89	59,72	1,12,42	60,82
Registration ...	1,42	1,47	1,53	1,58	1,68	1,81	1,57	1,88	1,87	1,80	1,61	1,64	1,71
Scheduled Taxes ...	...	...	..	. .	...	...	...	4	3	2	2	5	1
TOTAL ...	1,71,54	1,70,83	1,70,73	1,78,62	1,72,05	1,66,11	1,50,86	1,52,92	1,44,85	65,76	1,33,96	1,88,05	1,34,98
Forest and other capital outlay charged to revenue	...	...	...	8,03	8,41	9,06	14,35	7,69	6,40	−17,15	19	23	5
Railways	64,62	−1,08.46	—46	15	−4,70	...	...	...	...	...	...	.	...
Irrigation	67,58	51,88	52,29	67,72	57,80	60,22	43,14	36,04	36,77	...	28,59	16,59	30,44
Debt Services ...	−16,88	−13,09	−13,54	−14,08	−25,11	−25,48	−20,73	−21,64	−16,09	5,58	13,23	51,23	3,50
Civil Administration ...	5,59,58	4.80,99	4,84.64	4.97,95	5,52,44	5,77,10	5,87,40	5,71,52	5.51,88	5,78,74	5,19,38	5,00,09	4,99,08
Civil Works ..	1,90,94	2.01,12	1,82,46	2.33,01	2.17,60	2,51,21	2,50,21	2,11,64	2,10,78	1,11,40	91,39	87,90	86,46
Miscellaneous ...	47,08	63,89	67,74	59,01	75,27	89,55	62,31	78,75	82.42	85,04	70,35	70.25	90,75
Extraordinary Items ...	...	...	..	...	31,61	11.63	1,52	28	...	2	4	...	...
Total Expenditure in India	9,84,46	8,46,96	9,43,86	10,30,41	10,85,57	11,39,39	10,89,06	10,37,20	10,17,01	8,29,39	8,57,13	9,14,34	8,45,56
Expenditure in England with Exchange ...	39,82	38,12	42.88	49,12	56,38	57,31	63,91	61.77	60.37	55,07	51,44	51,02	...
TOTAL EXPENDITURE ...	10,24,28	8,85,08	9.86,74	0,79,53	11,41,75	11,96,70	10,52,97	10,98,97	10,77,38	8,84,46	9,08,57	9,65,36	8,45,56

Revenue—Government of the Central Provinces and Berar

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	1,49	3,42	2,30	1,36	2,18	1,72	2,23	2,74	2,65	8	...	...	...
Salt	...	...	.	...	...	..	...	...	...	1	1	..	...
Land Revenue ...	2,55,45	2,38,14	2,25,72	2,21,38	2,82,88	2.45,26	2,19,31	2,04,99	2,18,59	2,10,63	2,44,66	2,47,90	2,55,78
Excise	1,25,75	1,30,73	1,50.44	1,56,57	1,35,45	1,20,67	1,22,76	1,24,45	86,27	65,56	57,61	58,63	59,82
Stamps	58,25	67,28	68,34	71,05	61,45	65,20	69,72	67,18	59,19	55,55	57,22	57,60	58,38
Forest	47,07	51,05	52,33	49,88	53,21	50,78	54,46	59,97	51,12	44,47	42,90	43,18	44,48
Registration ...	6,83	6,62	6.79	6,66	6,48	6,57	7,30	7,00	5,35	4.79	5,10	5,23	5,30
Scheduled Taxes ...	...	...	..	...	...	.		..	...	...	...	...	...
TOTAL ...	4,94,84	4,97,54	5,05,92	5,06,90	4,91,65	4,90,20	4,75,78	4,67,33	4,23,17	3,81,09	4,07,50	4,14,54	4,23,76
Railways	...	.	...	...	...	...	...	...	.	...	...	...	...
Irrigation	1,86	1,63	91	92	1,92	1,23	−18	−26	3,20	−1,36	−1,47	1,78	2,75
Interest Receipts ...	8,19	5,14	3,30	2,72	2,49	3.77	3,82	2,86	4,18	3,22	4,72	5,06	5,69
Civil Administration ...	17,51	18,99	21,02	20,85	20,15	21,38	22,81	22,65	22,13	24,04	22,16	22,48	22,51
Civil Works	4,06	4,62	4,47	4,76	5,10	5,26	4,90	5,04	5,10	5.99	9,83	7,93	10,95
Miscellaneous	11,40	11,00	11,97	9,55	7,67	17.20	28,53	30,22	12,08	6,44	6,75	7,02	7,36
Contribution to the Central Government by Provincial Government	−22.00	−22,00	−22,00	−13,00	−22,00	...	..	...	.	...	.	...	...
Miscellaneous adjustments between Central and Provincial Governments	−52	+20	−25	1,99	−41	27	...	...	...	...	...	...	..
Extraordinary Receipts ..	...	...	...	45	45	25	18	34	13	25	2	15	15
Tranfers from Revenue Reserve Fund ...	..	..	...	...	...	...	...	...	...	..	...	...	...
Total Revenue in India ...	5,15,34	5,17,12	5,25,34	5,35,14	5,07,02	5.39,77	5,35,48	5.28,18	4,69,99	4,19,67	4.49,51	4,58,96	4,73,17
Revenue in England with Exchange ...	...	...	...	...	...	...	4	6	7	28	28	...	...
TOTAL REVENUE ...	5,15,34	5.17,12	5,25,34	5,35,14	5,07,02	5,39,77	5,35,88	5,28,24	4,70,06	4,19,95	4,49,79	4,58,96	4,73,17

Expenditure—Government of the Central Provinces and Berar

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	...	...	...	...	...	...	...	...	..	...	...	...
Land Revenue ...	44,74	46,29	23,80	25,00	26,64	28,74	29,22	28,91	28,67	22,37	18,89	18,28	18,67
Excise	7,20	9,51	7,44	21,02	17,85	14,75	12,93	11,43	11,70	9,30	8,12	10,10	9,16
Stamps	1,64	2,46	2,53	2,13	1,89	1,86	1,79	1,69	2,49	1,16	1,25	1,27	1,44
Forest	30,12	30,26	31,42	33,25	36,14	36,56	38,22	38,64	38,31	34,19	32,49	34,10	34,67
Registration ...	2,65	2,47	2,35	2,16	2,17	2,21	2,20	2,22	2,16	1,95	1,74	1,90	1,89
Scheduled Taxes ...	...	...	...	...	..	...	...	...	...	..	...	...	...
TOTAL ...	86,35	90,99	67,54	83,56	84,69	84,12	84,36	82,89	83,33	68,97	62,49	65,65	65,83
Forest and other Capital outlay charged to Revenue ...	...	...	..	2,42	2,52	2,00	2,21	1,12	1,29	34	24	5	10
Railways	...	...	..	...	...	...	...	...	...	...	...	...	...
Irrigation	32,72	23,01	25,60	26,60	28,00	27,48	29,32	29,59	30,61	31,30	32,10	32,39	32,05
Debt Services ...	4,20	3,48	2,41	1,55	23	4,43	3,86	—1,26	30	2,91	16,36	21,56	3,93
Civil Administration ...	2,35,30	2,24,68	2,42,42	2,51,18	2,66,11	2,62,18	2,79,92	2,70,51	2,71,01	2,48,35	2,30,16	2,38,01	2,43,18
Civil Works	62,76	68,19	63,85	75,80	1,02,12	1,09,93	96,57	81,68	69,92	51,37	51,18	54,47	61,24
Miscellaneous ...	58,29	74,88	72,14	73,54	71,33	29,06	39,80	56,40	37,88	34,69	38,29	41,44	39,61
Extaordinary Items ...	...	...	...	23	9	...	...	...	...	...	...	...	..
Total Expenditure in India	4,79,62	4,85,23	4,73,96	5,14,88	5,55,09	5,19,20	5,36,04	5,20,93	4,94,34	4,37,93	4,30,82	4,53,57	4,45,94
Expenditure in England with Exchange ...	9,95	9,19	14,30	17,74	19,29	18,47	18,97	21,54	19,89	19,72	18,61	19,67	18,77
TOTAL EXPENDITURE	4,89,57	4,94,42	4,88,26	5,32,62	5,74,38	5,37,67	5,55,01	5,42,47	5,14,23	4,57,65	4,49,43	4,73,24	4,64,71

Revenue—Government of Assam.

(*In Thousands of Rupees*)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	...	...	..	...	..	...	...	...	...	2,42	1,69	1,90	2,05
Salt	1,15	4,16	5,54	5,29	4,92	5,62	6,63	5,53	4,34	64	73	45	...
Land Revenue	92,02	1,03,29	1,05.14	1,07,11	1,06,72	1,12.79	1,17,13	1,20,74	1,15,26	1,20,83	1,17,92	1,09.20	1,08,40
Excise	54,13	60,50	65,96	73,82	71,93	70,94	66,39	66,23	58,37	52,34	40,42	32,87	30,96
Stamps	18,08	19,84	20,65	22,22	23.56	23,50	22,01	19,98	19,49	19.16	18,01	17,00	17,00
Forest	17,14	19,74	24,79	30,39	31,67	36,14	37,68	35,20	12,63	19,27	16,16	13,04	12,82
Registrations	1,33	1,78	1,87	2,13	2.28	2,30	2,32	2,09	11,97	1,92	1,63	1,50	1,51
Scheduled Taxes ...	...	...	...	..	...	...	...	...	...	...	...	...	...
TOTAL ...	1,83,85	2,09,31	2,23,95	2,40,96	2,41,08	2,51,29	2.52,16	2,49,77	2,22,06	2,16,58	1,96,56	1,75,96	1,72,74
Railways	—14	—12	17	29	17	12	...	...	...	...	...	...	...
Irrigation	...	...	...	...	...	...	...	...	...	...	...	...	...
Interest Receipt ...	98	87	61	80	1,02	1,59	1,57	2,74	95	1,10	1,13	99	91
Civil Administration ...	9,23	8,52	9,66	9,13	8,53	9,06	12,09	12,70	13,10	12,80	11,38	11,40	11,20
Civil works	4,52	4,32	5,59	4,51	4,30	4,21	4,68	4.48	5,90	7,92	9,55	7,08	8,04
Miscellaneous	99	2,94	4,99	3,35	3,34	2,95	3,12	2,25	2,41	1,62	1,04	1,27	1,25
Contribution to the Central Government by Provincial Governments ...	—15,00	—15,00	—15,00	—9.00	—15,00	...	...	..	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial Government ...	...	+4	52	1	5	14	...	...	...	...	...	...	...
Extraordinary Receipts ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Transfers from Revenue Reserve Fund ..	..	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India ...	1,84,43	2,10,88	2,30,49	2,50,05	2,43,49	2,69,36	2,73,62	2,71,94	2,44,42	2,40,02	2,19,66	1,96,70	1,94,14
Revenue in England with Exchange	...	...	...	...	...	...	8	1	1	3	1	...	...
TOTAL REVENUE ...	1,84,43	2,10,88	2,30,49	2,50,05	2,43,49	2,69,36	2,73,70	2,71,95	2,44,43	2,40,05	2,19,67	1,96,70	1,94,14

Expenditure—Government of Assam

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	...	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	14,72	15,72	16,29	17,29	18,09	19,10	19,07	20,55	21,88	20,61	18,82	17,95	17,60
Excise	2,27	1,87	1,75	13,88	10,99	7,90	9,60	9,15	8,48	6,00	6,09	5,37	5,09
Stamps	71	93	92	90	92	97	94	64	59	46	40	41	43
Forests	11,13	11,39	13,19	14,64	13,27	12,92	19,53	20,43	19,50	15,46	13,66	11,79	11,99
Registration ...	1,17	1,31	1,32	1,33	1,41	1,52	1,57	1,74	1,70	1,01	1,47	1,48	1,51
Scheduled Tax ...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	30,00	31,22	33,47	48,04	44,68	42,49	50,71	52,51	52,15	44,14	40,44	37,00	36,62
Forest and other capital outlay charged to Revenue	...	...	...	89	1,03	1,15	1,70	177	1,66	66	45	35	33
Railways	37	48	1,15	1,09	35	53	58	59	60	50	48	47	47
Irrigation	53	68	74	78	64	98	1,13	90	71	63	46	66	60
Debt Services ...	−50	−66	−65	−68	−67	−75	−86	−102	−65	2,42	4,78	6,20	4,74
Civil Administration ..	1,13,83	97,63	1,02,12	1,11.58	1,18,19	1,24,61	1,29.88	1,36,58	1,39,59	1,31.07	1.21,81	1,24,48	1,32,25
Civil Works	40,85	37,18	37.40	39.53	49.43	58,05	67,64	77,17	57,57	41,18	39,87	39,95	43,69
Miscellaneous ...	15,87	14,83	19,03	17.19	18,59	14,78	14,85	18,52	16,54	16,62	17,74	19,44	21,65
Extraordinary Items ...	...	...	...	34	...	...	...	...	...	...	5	52	30
Total Expenditure in India	2,00,95	1,82,63	1,93,26	2,18,76	2,32,24	2,41,84	2,65,63	2,87,02	2,68,17	2,37,22	2,26,08	2,29,02	2,40,65
Expenditure in England with Exchange ...	4,52	7,39	7,03	9,45	10,97	9,68	9,54	10,70	10,76	10,51	10,39	10,36	11,01
TOTAL EXPENDITURE ...	2,05,47	1,90,02	2,00,29	2,28.21	2,43,21	2,51,52	2,75,17	2,97,72	2,73,98	2,47,73	2,36,47	2,39,38	2,51,64

Revenue—Government of the Punjab

(In Thousands of Rupees.)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	5,60	4,24	1,90	3,82	4,02	4,83	4,02	3,60	2,00	...	...	...	...
Land Revenue ...	3,23,14	3,64,40	3,53,68	3,67,13	3,21,26	3,00,15	2,77,93	2,57.76	2,69,43	2,22,46	2,67,65	4,26,64	2,83,64
Excise	1,02,84	1,04,18	1,18,96	1.23,12	1,24,31	1,17,73	1,21,36	1,15,07	1,11,52	94,50	92,10	92,26	91,51
Stamp	88.65	95,90	1,16,61	1,14,35	1,13,27	1,17,94	1,21,03	1,15,08	1,1[illegible],02	1,10,50	1,14,51	1,11,75	1,13.09
Forest	34,44	33,86	37,27	41,12	39,08	31,94	35,28	31,58	23,85	22,44	19,52	19,00	17,14
Registration	6,81	7,16	8,53	9,44	9,11	9,08	9,21	9,33	8,38	8,15	9,43	9,26	9,27
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	..	...	...
TOTAL ...	5,61,57	6,19,74	6,37,25	5,98,95	6,11,05	5,81,67	5,68,83	5,32,42	5,25,20	4,58,05	5,03,21	6,58,91	5,14,65
Railways	...	...	...	...	...	...	...	...	.	...	...	...	...
Irrigation	3,63.79	3.92,12	4,30,18	4,57,08	3,80,08	4,08,33	3,74,39	3,94,45	3,61,59	3,80,63	3,67,88	2,68,47	4,35,02
Interest Receipts ...	6,65	5,04	5,91	11,76	8,79	10,39	8,59	9,70	10,02	9,53	9,88	10,12	9,60
Civil Administration ...	37,46	41,50	40,74	40,99	45,50	52,75	57,49	60,23	54.93	65,59	64,71	64,06	64,05
Civil Works	3,80	4,64	5,32	5.50	4,89	8,60	6,35	7,01	9,74	17,92	19,78	18,99	20,42
Miscellaneous ...	30,15	27,80	33.30	2.22,96	26,72	28,36	27,54	35,70	38,03	26,78	21,13	20,28	22,64
Contribution to the Central Government by Provincial Governments	—1,75,00	—1,75.00	—1,75,00	—1,13,84	—85,73	...	...	...	...	...	...	...	...
Miscellaneous adjustments between Central & Provincial Governments ...	—51	—1	18	44	..	28	...	...	...	...	...	...	...
Extraordinary Receipts...	...	...	...	1,27,84	84,69	1,16,05	72,24	73,27	46,46	36,09	37,28	37,91	25,02
Transfers from Revenue Reserve Fund ...	...	...	...	...	10,00	...	...	15,00	9,86	..	...	...	...
Total Revenue in India ...	8,27,91	9,15,85	9,77,83	11,52,00	10,85,99	12,06,43	11,15,48	11,27,78	10,55,83	9,94,79	10,23,87	10,78,74	10,91,40
Revenue in England with Exchange ...	—1	—2	—11	...	—28	—6	26	—59	32	1,71	5	4	...
TOTAL REVENUE ...	8,27,90	9,15,83	9,77,72	11,52,00	10,85,71	12,06,37	11,15,69	11,27,19	10,56,15	9,96,50	10,23,92	10,78,78	10,91,40

Expenditure—Government of the Punjab

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	...	...	..	...	...	...	...	...	...	...	...	...
Land Revenue ...	45,51	41,52	41,75	43,60	42,99	41,59	40,95	40,87	39,63	37,28	35,47	36,44	37,29
Excise ...	3,71	3,98	4,56	17,82	15,22	15,49	11,71	13,73	12,74	11,57	9,38	10,12	10,59
Stamps	2,47	1,99	2,50	2,75	2,40	2,32	2,43	3,46	1,87	1,86	2,02	1,83	1,97
Forest	48,93	28,95	25,93	24,95	26,80	25,52	24,93	24,73	23,38	20,99	18,12	18,30	22,67
Registration ...	1,21	1,07	95	1,00	99	1,03	1,04	99	96	87	76	77	79
Scheduled Taxes ...	...	...	...	...	...	.	...	..	...	...	...	...	...
TOTAL ...	1,01,83	77,51	75,69	90,12	88,40	85,95	81,06	83,78	78,58	72,52	65,74	67,46	73,31
Forest and other Capital outlay charged to Revenue	...	...	1	1,98	4,22	4,02	4,71	4,95	...	...	398	3,53	1,62
Railways	...	...	...	...	...	...	...	...	...	...	...	...	..
Irrigation	87,11	99,85	1,04,99	1,91,79	2,56,63	2,37,34	1,50,62	1,31,46	1,37,53	1,47,09	1,42,17	1,42,36	1,46,96
Debt Services ...	2,59	6,30	95	−4,18	−10,70	−22,89	−22,05	−16,27	−11,86	−8,84	8,68	−4,47	−20,75
Civil Administration ...	4,75,27	4,64,63	4,71,23	5,18,37	5,44,69	5,69,67	6,17,05	6,50,91	6,39,57	5,85,68	5,49,11	5,70,57	5,87,55
Civil Works ...	1,05,13	83,17	68,78	1,07,58	1,19,25	2,05,99	2,45,00	1,83,11	1,44,73	1,24,85	1,20,00	1,22,82	1,34,67
Miscellaneous ...	93,29	50,31	43,24	54,76	56,79	57,16	46,62	54,95	70,70	77,25	81,17	80,70	1,02,09
Extraordinary Items ...	...	...	...	...	...	...	...	...	...	..	...	...	...
Transfer to Revenue Reserve Fund ...	...	...	..	...	20,00	15,00	...	.	.	...	...	...	...
Total Expenditure in India ...	8,65,22	7,81,87	7,64,89	9,60,42	11,09,28	11,52,24	11,23,01	10,92,89	10,59,25	9,98,45	9,70,85	9,82,97	10,25,47
Expenditure in England with Exchange ...	20,22	22,14	29,84	33,96	37,42	34,29	38,19	39,36	39,49	39,59	35,56	38,07	...
TOTAL EXPENDITURE ...	8,85,44	8,04,01	7,94,73	9,94,38	11,46,70	11,86,53	11,61,20	11,32,25	10,98,74	10,38,04	10,06,41	10,21,04	10,25,47

Revenue—Shan States Federation

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income	...	...	...	...	...	...	...	...	...	...	...	...	...
Land Revenue	3	2,33	5,31	4,18	2,47	6,96	4,79	5,24	4,24	2,48	2,80	2,51	2,48
Excise	...	...	8	2	24	1,06	1,27	1,35	94	68	69	62	61
Stamps	...	...	...	...	...	...	33	23	19	25	15	19	19
Forest	6,61	16,63	14,93	13,85	18,58	16,20	20,26	15,84	12,61	7,52	4,97	689	5,30
Registration	...	...	...	1	1	1	1	1	1	1	1	1	1
Scheduled Taxes	...	...	...	...	...	...	...	...	...	...	36	70	56
TOTAL ...	6,64	18,96	20,32	18,06	21,30	24,23	26,66	22,67	17,99	10,94	8,98	10,92	9,15
Railways	...	...	...	...	...	...	...	...	...	...	...	...	..
Irrigation	..	...	...	...	...	...	...	..	...	...	...	...	...
Interest Receipts	...	...	...	...	...	1	1	1	...	1	1	...	...
Civil Administration	19	98	43	82	72	75	89	80	56	86	1,38	67	83
Civil Works	8	38	1,00	1,39	45	23	46	51	37	74	3,26	1,20	1,24
Miscellaneous	11,27	37,96	23,57	29,75	25,74	28,31	28,52	30,59	28,92	21,72	20,43	18,03	17,69
Contribution to the Central Government by Provincial Governments	...	...	...	...	...	...	...	...	...	...	...	...	...
Miscellaneous adjustment between Central and Provincial Governments	...	...	...	...	...	...	1,08	...	...	...	...	...	...
Extraordinary Receipts	...	...	...	...	...	...	...	...	...	...	...	...	...
Transfer from Revenue Reserve Fund	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India	18,18	58,28	45,32	50,02	48,21	53,53	57,62	54 58	47,84	34,27	34,06	30,82	28,91
Revenue in England with Exchange	...	...	...	...	...	...	...	..	...	...	1	.	...
TOTAL REVENUE ...	18,18	56,28	45,32	50,02	48,21	53,53	57,62	54.58	47,84	34,27	34,07	30,82	28,91

Expenditure—Shan States Federation

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Land Revenue	...	...	26	26	25	26	48	57	61	29	...	1	1
Excise	9	1	1	1	2	1,00	81	87	88	10	33	24	35
Stamps	...	...	...	...	...	...	1	..	...	...	...	1	1
Forest	1,36	3,28	3,86	3,99	4,13	4,29	4,47	4,97	4,52	4,04	3,44	3,38	3,20
Registration	...	...	...	1	1	1	1	1	1	1	1	1	1
TOTAL ...	1,45	3,29	4,13	4,27	4,71	5,56	5,78	6,42	6,02	4,44	3,78	3,65	3,58
Forest and other Capital outlay Charged to Revenue	...	...	...	...	...	...	40	33	60	4	3	1	4
Railway	...	...	...	...	...	...	...	...	...	...	...	..	...
Irrigation	...	4	4	8	2	...	2	5	5	2	1	1	...
Debt Services	...	...	...	...	...	...	−1	19	71	79	73	76	69
Civil Administration	3,82	13,03	13,84	14,40	13,87	13,99	15,85	16,27	16,29	15,61	13,73	14,25	13,63
Civil Works	5,26	20,29	23,86	28,66	26,31	32,30	34,27	24,47	26,67	23,97	13,11	10,13	10,23
Miscellaneous	72	2,79	3,05	2,74	2,52	3,16	3,29	3,02	2,82	2,51	1,68	1,54	1,51
Extraordinary Items	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Expenditure in India	11,25	39,44	44,92	50,15	47,43	55,01	59,60	50,75	53,16	47,38	33,12	30,35	29,68
Expenditure in England with Exchange ...	...	...	...	34	46	1,40	71	92	68	75	77	85	86
TOTAL EXPENDITURE ...	11,25	39,44	44,92	50,49	47,89	56,41	60,31	51,67	53,84	48,13	33,89	31,20	30,54

Revenue—Bihar and Orissa

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...	2,87	2,55	2,54	2,41	3,21	3,20	4,74	4 49	3,14	2,13	1,22	1,25	1,25
Salt	...	...	...	...	..	...	...	...	.	2,84	2,19	1,50	1,50
Land Revenue ...	1,65,40	1,65,62	1,67,58	1,67,03	1,69,21	1,68,[illegible]	1,73,98	1,77,83	1,80,04	1,76,09	1,80,85	1,77,91	1,80 13
Excise	1,53,97	1,83,28	1,75,99	1,96,63	1,97,35	1,96,40	1,89,27	1,90,82	1,42,09	1,22,67	1,29,01	1,22,00	1,27,00
Stamps	95,12	96,33	1,00,13	1,07,52	1,07,12	1,69,75	1,10,36	1,11,31	1,07,80	1,05,73	1,05,57	1,11,50	1,11,50
Forest	8,82	10,29	10,71	10,29	8,45	9,39	10,97	9,39	8,11	6,28	6,19	6,84	6,90
Registration ...	12,66	13,65	13,74	15,01	13,12	16,74	17,03	17,08	14,54	13,30	12,66	13,26	13,50
Scheduled Taxes ...	...	...	..	...	..		...	...	...	...	..		
TOTAL ...	4,38,84	4,71,72	4,70,99	4,98,89	5,00,79	5,04,14	5,06,85	5,10,95	4,55,72	4,25,44	4,30,69	4,34,26	4,41,78
Railway	...	...	...	...	.	...		...	...	...	...	...	...
Irrigation	16,75	18,16	18,25	22,54	24,27	22,14	20,92	17,91	17,98	21,42	22,93	19,04	27,15
Interest Receipts ...	3,30	4,32	5,04	7,52	9,33	7,29	7,72	7,56	5,92	5,32	5,16	4,85	4,72
Civil Administration ...	20,31	21,20	26,98	29,20	25,51	21,26	29,10	31,42	23,76	23,26	29,19	25,96	24,51
Civil Works ...	5,84	5,82	8,36	6,66	5,50	8,21	6,45	6,46	6,86	8,78	10,65	9,48	9,42
Miscellaneous ...	9,22	7,25	6,28	13,83	7,22	5,05	7,33	20,25	10,55	27,03	7,20	7,01	12,16
Contribution to the Central Government by Provincial Governments ...	...	...	...	.	...	...	...	...	...	...	...	...	...
Miscellaneous adjustment between Central and Provincial Governments ...	—15	—16	64	30	37	51	...	...	...	...	...	...	...
Extraordinary Receipts	...	...	...	...	...	...	...	...	1,58	...	...	...	...
Transfer from Revenue Reserve Fund ...	...	...	...	...	...	.	...	..	...	...	...	...	...
Total Revenue in India	4,94,11	5,28,31	5,36,54	5,78,94	5,73,99	5,72,44	5,77,88	5,94,55	5,27,37	5,19,25	5,05,82	5,00,60	5,22,24
Revenue in England with Exchange ...	...	—2	—1	...	—2	—2	34	—1	22	22	1	...	...
TOTAL REVENUE	4,94,11	5,28,29	5,36,53	5,78,94	5,73,97	5,72,42	5,78,22	5,94,54	5,27,59	5,19,47	5,05,83	5,00,60	5,22,24

Expenditure—Bihar and Orissa

(In Thousands of Rupees)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income Tax ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	15,76	18,57	21,14	21,21	21.39	23,34	27,30	25.72	24,63	21,80	18,99	17,35	15,63
Excise ...	8,93	9,36	9,90	22.75	19.89	19,16	18,03	18.33	18.14	15,41	14,45	14,73	17,02
Stamps ...	2,61	3,27	2,86	2,97	3.06	3.18	3.39	2.53	2.39	2,17	2,62	2,06	1,98
Forests ...	7,06	7,45	7,79	6,53	8,41	6.63	7.19	7,62	7.34	7,01	6,17	6,59	7,21
Registration ...	5,37	5.50	5,45	5.88	6.05	6.24	6.23	6,49	6.41	6,18	5,71	6,16	6,53
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total .	39.73	44,15	47.14	59.34	58,83	58.55	62,34	60.69	58.91	52.57	47.34	46,89	48,37
Forest and other Capital outlay charged to Revenue ...	...	...	...	99	1,31	1.29	1.82	1.40	1.51	62	15	21	... 17
Railways ...	..	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	23,57	24.01	25,18	25,43	27,64	27,41	25,76	23.49	25.47	25.94	24,41	22,41	22,79
Debt Services ...	2.28	3,36	3.55	3,42	2.43	1.93	1,28	1.82	1.99	1.95	2.20	1,98	2,02
Civil Administration ...	2.87,29	2.99,59	3,15.30	3.31.72	3.62.40	3.53,35	3,62.65	3,78.84	3,80.88	3.45.50	3.27.54	3,39,74	3,63,62
Civil Works ...	56.99	64,29	66.85	72,98	88.18	84.32	76,42	85.63	80.25	36.07	42.20	41,21	51,12
Miscellaneous ...	41,06	36,46	37,61	39.91	40,43	37.79	32.47	34,12	32.79	36.42	34,24	25,76	48,71
Extraordinary Items ...	...	...	...	...	...	...	...	...	...	1	18	13	20
Total Expenditure in India ...	4.50,92	4,71,86	4,95,63	5,33.79	5,81.22	5,64.54	5.62,25	5,85,99	5,81.80	5,19,08	4.78.26	4,88,17	5,37,00
Expenditure in England with Exchange ...	12,32	12.48	17.49	21.14	23,78	22.57	23.02	22,43	24.33	23.46	22,22	22.74	...
Total Expenditure ...	4,63,24	4,84,34	5,13,12	5.54.93	6.05.00	5,87,11	5,85.27	6,08.42	6,06.13	5,42,54	5,00,48	5,10,91	5,37,00

Revenue—Government of Coorg

(In Thousands of Rupees)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income	...	...	...	...	...	...	...	...	...	...	...
Land Revenue	3,56	3,76	3,75	3,73	3,68	3,87	3,15	4,05	3,65	3,75	3,50
Excise	3,48	3,40	3,30	3,67	3,77	3,88	3,39	2,60	2,65	2,69	2,63
Stamps	87	84	92	93	1,00	1,08	98	87	79	75	79
Forest	6,68	5,39	4,58	4,93	5,26	5,72	3,09	4,86	3,37	4,27	3,71
Registration	7	7	7	8	7	9	5	4	7	6	6
Scheduled Taxes	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	14,66	13,46	12,62	13,39	13,78	14,64	10,96	12,12	10,53	11,52	10,69
Railways	...	...	...	...	..	..	...	...	..	...	..
Irrigation	..	.	...	...	...	..	...	...	...	...	...
Interest Receipts	...	...	...	...	...	...	...	...	...	...	...
Civil Administration	32	33	34	41	47	57	67	66	96	92	1,94
Civil Works	16	14	15	15	12	36	23	31	26	35	26
Miscellaneous	2	4	10	4	5	8	2	2	3	2	2
Contribution to Central Government ...	−12	−12	−12	...	...	...	...	...	...	...	..
Total Revenue in India	15,04	13,85	13,08	13,93	14,12	15,65	11,88	13,41	11,78	12,81	11,91
Revenue in England with Exchange ...	...	...	...	...	...	7	...	...	...	...	...
TOTAL REVENUE	15,04	13,85	13,08	13,99	14,42	15,72	11,88	13,41	11,78	12,81	11,91

Expenditure—Government of Coorg.

(In Thousands of Rupees)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax	...	...	...	...	...	...	...	...	...	...	..
Land Revenue	72	77	78	78	80	83	94	82	76	81	77
Excise	6	6	10	7	9	11	12	11	9	10	10
Stamps	2	2	2	3	4	2	2	1	2	2	2
Forests	3.18	2,80	2.63	2.34	2,57	2.21	2,41	2.31	2,14	2,05	205
Registration	1	2	2	2	2	2	2	2	2	2	2
Scheduled Taxes	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	3.99	3.67	3,57	3.24	3.32	3.19	3.51	3.27	3.03	3,00	296
Forest and other Capital outlay charged to Revenue	38	23	19	13	13	90	56	17	8	...	4
Railways	...	...	...	...	...	...	...	...	...	...	...
Irrigation	7	14	6	10	8	11	8	8	5	8	9
Debt Services	−1	−3	−4	−5	−5	−8	−14	−16	−15	−13	−8
Civil Administration	4.81	5,12	5.17	5.26	5.27	5.85	6.23	5.69	5.52	6.04	603
Civil Works	2,48	2.16	2,48	2.39	2.19	3.97	3.85	2,94	3.31	3.63	207
Miscellaneous	92	88	86	1.06	70	1.02	1.02	1.31	1.01	1,13	127
Extraordinary items	...	...	...	...	...	...	...	...	6	5	2
Total Expenditure in India	12,64	12,17	12.32	12.16	12,14	14.96	15,11	13.30	12.94	13,80	12,10
Expenditure in England with Exchange ...	42	33	51	55	78	39	36	68	65	41	...
TOTAL EXPENDITURE ...	13.06	12,80	12.86	12.71	12,92	15.35	15.47	13.98	13.59	14.21	12,40

Revenue—Government of North-West Frontier Province.

(*In Thousands of Rupees.*)

	1932-33	Revised 1933-34	Budget 1934-35
Taxes on Income ...			
Land Revenue ...	18,17	21,30	21,44
Excise	9,11	7,76	7,42
Stamp	9,82	9,73	9,73
Forest	...	..	...
Registration	7,39	4,23	2,54
Scheduled Taxes ...	69	73	...
Total ...	45,18	43,75	41,13
Railways			
Irrigation	8,81	7,91	7,87
Interest Receipts ...	81	80	60
Civil Administration ...	5,49	6,89	6,89
Civil Works	2,79	5,68	49,61
Miscellaneous	3,12	2,90	2,90
Contribution to the Central Government by Provincial Governments ..	...	...	...
Miscellaneous Adjustments between Central and Provincial Governments .	63,91	1,00,60	1,00,00
Extraordinary Receipts ...			
Transfers from Reserve Fund			
Total Revenue in India ...			
Revenue in England with Exchange			
Total Revenue	1,30,11	1,67,93	1,63,16

Expenditure—Government of North-West Frontier Province.

	1932-33	Revised 1933-34	Budget 1934-35
Income-Tax ...	...	...	
Land Revenue	3,07	3,35	
Excise ...	76	85	
Stamps ...	20	21	
Forests ...	5,66	4,06	
Registration ...	10	12	
Scheduled Taxes			
Total	9,79	8,59	
Forest and other capital outlay charged to Revenue	18		
Railways	...		
Irrigation	13,64	13,97	
Debt Services	1,24	1,59	
Civil Administration ...	89,38	96,76	
Civil Works	32,17	31,28	
Miscellaneous	8,94	10,18	
Extraordinary Items ...	1		
Total Expenditure in India	1,54,99	1,62,39	1,74,69
Expenditure in England with Exchange ...	3,17	5,53	...
Total Expenditure ...	1,58,16	1,67,92	1,74,69

Revenue and Expenditure of the Central Government.

The following statement gives the revenue and expenditure of the Central Government since 1921-22. The sterling amounts are converted into rupees at the average of the daily rates for telegraphic transfers in Calcutta on London in each year. The rate of conversion has been assumed to be 1s. $6\frac{1}{3}$d. in 1933-34 and as usual 1s. 6d. in 1934-35. The figures given below are in Lakhs of Rupees

YEAR	(1) Revenue excluding transfer from Revenue Reserve Fund	(2) Expenditure excluding transfer to Revenue Reserve Fund and provision for Reduction or Avoidance of Debt and items shown in (3)	(3) Transfer to Earthquake Fund and Special Subventions to Provinces	(4) Balance of (1) and (2) *plus* (3)	(5) Provision for Reduction or Avoidance of Debt and Transfers to or from Revenue Reserve Fund	(6) Final Surplus (+) Deficit (−)
1921-22	1,15,21	1,38,40		−23,19	4,46	−27,65
1922-23	1,21,41	1,31,33	...	−10,47	4,55	−15,02
1923-24	1,33,17	1,27,16	...	+6,01	3,62	+2,39
1924-25	1,38,94	1,28,58	...	+9,46	3,78	+5,68
1925-26	1,33,33	1,25,05	...	+8,28	4,97	+3,31
1926-27	1,31,70	1,23,77	...	+7,93	(*a*) 7,93	...
1927-28	1,25,04	1,22,22	...	+2,82	(*b*) 2,82	...
1928-29	1,28,24	1,23,88	...	+4,36	(*c*) 4,68	−32
1929-30	1,32,69	1,26,68	...	+6,01	5,74	+27
1930-31	1,24,60	1,30,94	...	5,14	6,14	−11,58
1931-32	1,21,64	1,26,50	...	− 4,86	6,89	−11,75
1932-33	1,26,40	1,18,91	...	+ 8,39	6,84	+1,55
1933-34 (Revised)	1,19,31	1,15,02	1,29	+ 3,00	3,00	...
1934-35 (Budget)	1,20,43	1,15,10	2,14	+3,19	3,00	+19

(*a*) After adding 2,96 transferred to Revenue Reserve Fund.
(*b*) After deducting 2,22 transferred from Revenue Reserve Fund.
(*c*) After deducting 74 transferred from Revenue Reserve Fund.

Total Revenue and Expenditure charged to Revenue of the various Provincial Governments since 1922-23
(In Thousands of Rupees)

Government of	Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27		Accounts, 1927-28	
	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure
1. Madras	12,57,75	12,60,77	12,99,38	12,63,07	12,79,03	13,08,50	14,71,35	13,72,99	15,18,50	14,17,02	16,99,86	14,98,13
2. Bombay	14,17,20	13,53,17	14,52,82	14,23,45	14,99,18	14,72,57	15,21,18	16,15,52	14,58,07	16,23,67	15,31,48	15,63,26
3. Bengal	9,84,96	9,59,21	10,13,16	9,77,95	10,34,24	9,76,02	10,70,17	10,30,63	10,50,36	10,70,95	10,81,29	10,85,57
4. United Provinces	10,06,05	10,70,98	10,81,14	10,47,50	9,99,53	10,42,49	10,86,68	11,17,43	11,88,71	11,33,80	12,86,88	11,74,82
5. Punjab	8,27,90	8,85,44	9,15,83	8,04,01	9,77,72	7,94,73	11,52,00	9,94,38	10,35,71	11,46,70	12,06,37	11,86,53
6. Burma	8,67,94	10,24,28	8,58,19	8,85,08	9,85,76	9,86,74	10,18,82	10,79,53	10,06,04	11,41,75	10,72,09	11,06,70
Shan States Federation ...	18,18	11,25	58,28	39,44	45,32	44,92	50,02	50,49	48,21	47,89	53,53	56,41
7. Bihar and Orissa	4,94,11	4,63,24	5,28,29	4,81,34	5,36,53	5,13,12	5,78,94	5,54,93	5,73,97	6,05,00	5,72,42	5,87,11
8. Central Provinces and Bihar ...	5,15,24	4,89,57	5,17,12	4,94,42	5,25,34	4,88,26	5,35,14	5,32,62	5,07,02	5,74,38	5,39,77	5,37,67
9 Assam	1,84,43	2,05,47	2,10,88	1,90,02	2,30,49	2,00,29	2,50,05	2,28,21	2,43,49	2,43,21	2,69,36	2,51,52
10. Coorg	...	.	...	...	15,04	13,06	13,85	12,80	13,08	12,86	13,99	12,71
Total ...	75,73,86	77,23,38	78,85,09	76,09,28	81,28,18	78,40,70	87,51,20	85,89,53	86,43,16	90,17,23	93,29,54	91,50,43
Net .	−1,49,53		+2,75,81		−2,87,48		+1,61,67		−3,74,07		+1,79,11	

Total Revenue and Expenditure charged to Revenue of the various Provincial Governments since 1922-23—(*Contd.*)

(In Thousands of Rupees)

Government of	Accounts, 1928-29		Accounts, 1929-30		Accounts, 1930-31		Accounts, 1931-32		Accounts, estimate 1932-33		Revised estimate 1933-34		Budget estimate 1934-35	
	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure
1. Madras ...	17,53,11	16,13,97	18,08,87	16,84,78	16,83,93	17,89,69	16,29,88	16,24,17	16,40,25	15,63,04	15,76,38	15,75,76	16,43,63	15,84,89
2. Bombay ...	15,21,74	15,55,60	15,91,33	15,80,80	13,80,86	15,61,91	14,82,01	15,20,38	15,25,17	14,98,95	15,48,03	15,44,17	15,22,83	15,22,15
3. Bengal ...	10,98,67	10,90,47	11,35,87	11,33,64	9,66,27	11,40,79	9,01,07	11,00,52	9,38,03	10,67,83	9,06,56	10,94,49	9,19,47	11,28,69
4. United Provinces ...	11,45,15	12,28,49	12,98,61	12,33,20	11,96,73	12,87,77	11,21,66	11,83,69	11,45,21	11,29,93	11,28,88	11,30,48	11,49,99	11,54,84
5. Punjab ...	11,15,69	11,61,20	11,27,19	11,32,25	10,36,15	10,98,74	9,96,30	10,38,04	10,23,92	10,06,41	10,78,78	10,21,04	10,91,39	10,08,78
6. Burma ...	10,54,55	11,52,97	10,31,83	10,98,97	7,22,34	10,77,38	9,60,07	8,84,46	7,80,87	9,08,57	7,96,24	9,65,36	7,96,65	8,45,56
Shan States Federation	57,62	60,31	54,58	51,67	47,84	53,84	34,28	48,13	34,07	33,89	30,82	31,20	28,91	30,54
7. Bihar and Orissa ...	5,78,22	5,85,27	5,94,54	6,09,42	5,27,59	6,06,13	5,19,47	5,42,53	5,05,83	5,00,48	5,00,60	5,10,91	5,22,24	5,16,05
8. Central Provinces and Berar ...	5,35,88	5,55,01	5,28,24	5,42,47	4,70,06	5,14,23	4,19,95	4,57,65	4,49,79	4,19,43	4,58,96	4,73,24	4,73,17	4,64,71
9. North-West Frontier Province(*a*)	...	...	...	...	...	...	...	...	1,60,11	1,58,16	1,67,93	1,67,92	1,68,46	1,74,69
10. Assam ...	2,73,70	2,75,17	2,71,95	2,97,72	2,44,43	2,78,93	2,40,05	2,47,73	2,19,67	2,36,47	1,96,70	2,39,38	1,94,14	2,51,64
11. Coorg ...	14,42	12,92	15,72	15,35	11,88	15,47	13,41	13,98	11,78	13,59	12,81	14,21	11,28	12,20
Total ...	91,48,75	92,91,38	94,57,93	93,80,27	83,08,68	94,24,88	83,18,58	86,70,58	84,34,70	85,66,75	84,12,69	87,68,16	85,17,16	87,94,63
Net ...	−1,42,63		+77,66		−11,16,80		−3,52,20		−1,32,05		−3,55,47		−2,77,47	

(*a*) Became a Governor's Province from the 18th April, 1932.

Railway Budget

Review of results from 1925-26 to 1934-35 Commercial and Strategic lines together.

(Figures in Lakhs of Rupees)

	Mileage open	Gross Traffic receipts	Ordinary operating expenses	Appropriation to Depreciation Fund	Net Traffic Receipts	Net Miscellaneous charges (including surplus profits payable to Companies) after deducting miscellaneous receipts	Net Revenue	Interest charges	Surplus	Paid as contribution to general revenues	Transferred to Railway Reserve
1925-26	27,107	98,94	52,99	10,67	35,28	1,19	34,09	24,81	9,28	5,49	3,79
1926-27	27,726	98,42	52,89	10,89	34,64	1,27	33,37	25,87	7,50	6,01	1,49
1927-28	28,149	1,03,43	53,06	11,38	38,99	87	38,12	27,27	10,85	6,28	4,57
1928-29	29,224	1,03,73	54,22	12,00	37,51	37	37,14	29,33	7,81	5,23	2,58
1929-30	30,798	1,02,70	55,59	12,59	34,52	2	34,50	30,46	4,04	6,12	−2,08
1930-31	31,117	95,10	54,39	13,07	27,64	11	27,53	32,72	−5,19	5,74	−10,93
1931-32	31,558	86,63	49,31	13,46	23,86	−1	23,87	33,07	−9,20	...	−4,95
1932-33	31,702	84,43	49,08	13,77	21,58	−1,10	22,68	32,91	−10,23	...	...
Revised estimate 1933-34	31,707	86,50	49,44	13,60	23,46	−1,16	24,62	32,40	−7,78	...	...
Budget estimate 1934-35	31,712	94,25	52,25	13,65	28,35	−1,69	26,75	32,05	−5,30	...	...

NOTE 1—The balance of the loss in 1931-32 and the total loss in the following years has been, or will be, met by temporary borrowings from the Depreciation Fund.

NOTE 2—Credits for material released from works not charged to revenue which were taken in reduction of operating expenses up to 1931-32 and have since then been added to receipts are included in net miscellanous charges.

NOTE 3—Gross Traffic receipts and working expenses for 1934-35 are for the whole system including worked lines. For comparison they should be reduced by 5,25 & 2,65 respectively. Similarly, net miscellaneous charges in 1934-35 include payments of net earnings to worked lines amounting to 2,60

2. The statement below gives a comparison of the allotments made for open lines and lines under construction during the same period (*viz*., 1932-33 to 1934-35) under Commercial and Strategic lines separately :—

(Figures in Thousands of Rupees.)

—		Accounts, 1932-33	Revised Estimate 1933-34	Budget Estimate 1934-35
Commercial				
Open line (including rolling stock) ...	Capital	−23,58	1,50	4,63,85
	Dep. Fund	*6,11,43*	*5,86,00*	*8,43,65*
Total open lines	Capital	−23,58	1,50	4,63,85
	Dep. Fund	*6,11,43*	*5,86,00*	*8,43,65*
Lines under construction ..	Capital	57,04	25,00	11,00
	Dep. Fund			
Total Commercial ...	Capital	33,46	26,50	4,74,85
	Dep. Fund	*6,11,43*	*5,86,00*	*8,43,65*
	Total ...	6,44,89	6,12,50	13,18,50
Strategic.				
Open line (including rolling stock) ...	Capital ...	−22,81	−1,50	−6,85
	Dep. Fund ...	*23,28*	*14,00*	*23,35*
Lines under construction—Capital	... ...	22	...	...
Total Strategic	Capital ...	−22,59	−1,50	−6,85
	Dep. Fund ...	*23,28*	*14,00*	*23,35*
Total Commercial and Strategic Lines ...	Capital ...	10,87	25,00	4,68,00
	Dep. Fund ...	*6,34,71*	*6,00,00*	*8,67,00*
	Total	6,45,58	6,25,00	13,35,00

Capital Expenditure on State-owned Railways

(Figures in Thousands of Rupees)

RAILWAYS	Accounts 1932-33	To end of 1932-33	Revised Estimate, 1933-34	Budget Estimate 1934-35	To end of 1934-35
OPEN LINES					
State Railways managed by the State—					
Burma	−5,08	31,84,31	12,00	10,40	32,06,71
Eastern Bengal	10,68	48,54,00	−23,00	31,69	48,62,69
East Indian	30,38	1,36,72,63	−29,00	98,37	1,37,42,00
Great Indian Peninsula ...	−71,84	1,22,52,40	−64,00	21,20	1,22,09,60
North Western	−43,90	1,07,12,47	14,00	16,24	1,07,42,71
Strategic Lines	−22,76	33,74,37	−1,50	−6,85	33,66,02
Miscellaneous	−60	2,43,67	...	...	2,43,67
Abandoned projects	...	32,26	...	...	32,26
State Railway Collieries ...	−8	1,00,09	−1,50	−5	98,54
Total State Railways managed by State	−1,03,20	4,84,26,20	−93,00	1,71,00	4,85,04,20
State Railways managed by Companies or Indian States—					
Assam-Bengal	6,32	21,14,36	5,20	10,62	21,30,18
Bengal Nagpur	14,05	72,12,66	13,00	45,87	72,71,53
Bengal and North-Western (Tirhut)	−1,23	9,67,21	4,00	4,51	9,75,72
Bezwada Extension	24	17,94	5	7	18,06
Bombay, Baroda and Central India	14,81	75,78,60	12,00	48,96	76,39,56
Dhona Kurnoo	17	26,87	50	45	27,82
Jodhpur	1,75	86,07	75	2,18	89,00
Madras and Southern Mahratta ...	5,74	52,94,77	18,00	46,34	53,59,11
Rohilkund and Kumaon (Lucknow Bareilly)	33	2,45,70	77	2,16	2,48,63
South Indian	19,05	36,87,00	28,00	53,10	37,68,10
Total State Railways managed by Companies or Indian States ...	61,23	2,72,31,18	82,27	2,14,26	2,75,27,71
Total Open Lines	−41,97	7,56,57,38	−10,73	3,85,26	7,60,31,91

CURRENCY AND MONETARY SECTION:

INDIAN FINANCE IN 1933-34

While in 1932-33 the course of international finance was determined largely by the currency and exchange policy of Great Britain with her freedom from the embarrassments and restrictions of the gold standard, the principal factor in 1933-34 is the extraordinary situation that obtained in the United States and the policies adopted by Mr. Roosevelt. It will be remembered that 1932-33 closed with a restoration of some sort of order in American finance and banking. At the beginning of the year under review Mr. Roosevelt had been in office for less than a month and all that he was able to do during that period was the introduction of vigorous measures for enabling banks to re-open and daily business to be resumed. It was not till the new financial year that Mr. Roosevelt could actively take up the many problems that, he knew from a long time ahead, he would have to face. He did not take long to decide that nothing could be done to stimulate a recovery with the dollar on its old gold value and that devaluation was the beginning of any scheme of economic reform in the States. On April 19 he announced the abandonment of the gold standard, though at that time the representatives of France and Great Britain, whom he had invited for a Conference on the question of war debts and world economy, were on the high seas on their way to America. Though Mr. Roosevelt had acted promptly in this matter and without waiting for a reference to the principal nations of the world, he was at this time a believer in the possibility of convening a World Economic Conference and securing through its agency the many measures of reform capable of leading the world out of the depression and leading it on to heights of prosperity. The European representatives too readily put up with the slight implied in Mr. Roosevelt's percipitate action in regard to the gold standard; and little difficulty was experienced in bringing about the general agreement about convening a World Economic Conference.

It is well-known that the general background of international finance during 1933-34 is provided by the protracted futilities of the World Economic Conference and the daring experiments in currency and exchange policies which Mr. Roosevelt adopted practically throughout the year under review. It is hardly necessary in this context to go into details of the history of the Conference or the various measures adopted by Mr. Roosevelt. Suffice it here that during the time the World Economic Conference was meeting one disappointment after another the principal gold currencies were subject to the gravest trials and tribulations and that the failure of the Conference brought on a feeling amongst the Governments of the world, perhaps more by intuition than by reasoning, that a recovery is to be sought by co ordination of national economic policies than by attempts at their abandonment. Likewise, the world learnt to take Mr. Roosevelt's monetary experiments in the proper spirit. Mr. Roosevelt's measures were directed towards the ultimate revaluation of the dollar in terms of gold without prejudice to the interests of the American economic system. For it should be remembered that a too abrupt or a too high valuation of the dollar would have the effect of retarding the recovery of American prices. Mr. Roosevelt therefore proceeded warily and step by step. It was first a case of attempting to raise prices through a depreciated dollar and the threat of inflation. Then Mr. Roosevelt attempted the next step of buying American-mined gold at prices to be declared from day to day by the Reconstruction Finance Corporation. A further development in this was the system of the purchases of gold both in America and abroad and, these steps led ultimately to the revaluation of the dollar at the level of 59.06 cents on January 31.

Before effecting this revaluation, Mr. Roosevelt gave statutory recognition to the principle of the national ownership of monetary gold. Its immediate purpose was to enable the Treasury to take the credit for the enhanced dollar value of the gold stocks of the Federal Reserve System. But it should be easy to see that there is far more than

the mere impecunious opportunism in this measure. The revaluation of the dollar did not bring about any steadiness in international finance; for at the time it was effected the state of the principal exchanges left a premium on gold in America which could not be immediately wiped out by the necessary gold shipments across the Atlantic.

It is in such a background that the main events of 1933-34 have to be set and studied. It inevitably means a period of large-scale fluctuations in the principal exchanges, and danger to the principal gold currencies.

The history of the principal international exchanges may be adequately indicated, if it is pointed out that the year may be roughly divided into four periods, the first, in which the determining factor was the loss of confidence in American banking with the consequent flight from the dollar, the second, marked by the instability of the gold currencies as a result of the breakdown of the Stabilisation Agreemtnt and the general floundering of the World Economic Conference, the third, in which President Roosevelt carried out his monetary experiments with a rapidly depreciating dollar and the fourth being the two months following the revaluation of the dollar. Taking the American policy first, it may be said that President Roosevelt was at first content to watch the effects of the mere promise of inflation and the fall in the dollar on share and commodity prices. When later it was realised that a low exchange by itself would not suffice to sustain prices and that, even if the markets were to take the cue from it, speculation is bound to be overdone with the consequent collapse in prices, he decided to bring about a depreciation in the gold value of the dollar by carrying out a new policy specifically in relation to gold.

Mr. Roosevelt's Gold Purchase Policy.

The beginning was marked by the buying of gold above the Federal Reserve Bank's purchase price. At first, it is strange that Mr. Roosevelt should have thought at any time that the price, at which the American Government were prepared to buy gold, mined in America, would have any effect on the international value of gold or on the general level of prices abroad. But such a belief was entertained; and as soon as the disillusionment came, the President decided that an active policy of gold purchases both at home and abroad was necessary. The policy was announced in the usual dramatic manner by Mr. Roosevelt; and the Reconstruction Finance Corporation was empowered to carry out such purchases on the basis of prices to be declared from day-to-day. It was reported on the 25th of October that the first purchase was made at 31.36 dollars per fine ounce as against the Federal Reserve Bank's statutory buying price of gold of 20.67 dollars per fine ounce. After that the price was raised progressively, with a little halt now and again, until at the end of 1933 it reached 34.06 dollars. On January 31, came the revaluation of the dollar at 59.06 per cent. of its former gold value.

Movement of the Exchanges.

These sensational turns were naturally reflected on the foreign exchange market and the Sterling-Dollar rate was found to move within a wide range. On April 20th there was a movement of 23 cents from 3.70 to 3.93 on the 28th July, also 23 cents from 4.32 to 4.55, and on 27th November 21 cents from 5.04½ to 5.25½. During the first 3 months of 1933 the dollar exchange moved only within narrow limits, the highest and lowest being 3.48 and 3.32⅝ respectively, but during the next three months, namely April-June, the exchange moved between 3.40⅝ and 4.41½. From July to September the rate ranged from 4.27½ to 4.87¼ and from October to December from 4.40 to 5.53. On July 10th the British Government issued an offer to convert the $250,000,000 United Kingdom 5½ per cent. dollar bonds into sterling: this caused a temporary setback in the upward movement of the exchange.

The gold exchanges have also had important movements during the year in terms of sterling. Budgetary difficulties in France caused a weakness in francs at the beginning of the year and shipments of gold were made to New York. The exchange rose to 88⅛ in London on the 5th February, 1933 but purchases of francs for account of the Exchange Equalisation Fund steadied the rate and, the exchange rallied to 86 5/16 later in the month. During the banking holiday in the U. S. A. francs were on offer and the rate touched 89 on March 7th, but the operation of the Fund made the rate improve to 86 11/16 on the 13th March. Another break occurred in April when the U. S. A., definitely abandoned the gold standard and the rate touched 90, but by the 1st May the exchange was down again and touched 83 9/16. The Belgian exchange was free during 1933 from the onslaughts of speculators to which it was subjected in 1932, it being recognised that the belga was firmly attached to the French franc, which fluctuated in Brussels between

28.04½ and 28.26⅞. As referred to earlier, fears were expressed during the year that Holland might be forced off the gold standard, as large amounts of gold were withdrawn from that country, the gold holding of the Bank of Netherlands being reduced to Fls. 736 millions on the 10th July, from Fls. 1,032 millions at the end of December, 1932. Since July, however, the position has considerably improved and gold has been returning to the country.

The year 1934 has not been free from its share of the devaluation of currencies. Both Czechoslovakia and Austria joined the deserters from gold, the former almost solely with a view to help her industries to export more to the foreign markets.

All these troubles and travails of international finance means not a little of complexity in the British exchange policy, the main question being whether, in the event of America further depressing the dollar, Great Britain would follow suit. It must be said that British exchange policy was carried out with consummate tact ; and the usual practical instinct of the Britisher enabled the authorities to carry out their duties to the satisfaction of all concerned. At various stages, particularly, after the initiation of President's Roosevelt's policy of gold purchase, there were frequent rumours of an exchange agreement having been arrived at among the three important nations. It was not till the final revaluation of the dollar at 59.06 cents on January 31 that there was any abatement in such speculation, but even then such speculation was not altogether put an end to, as the Act of Congress only set the upper limit of revaluation at 60 per cent. and the Thomas Amendment still leaves President Roosevelt free to lower the dollar value up to 50 cents. It is generally believed that the scope of devaluation is now almost the only weapon in the armoury of the President and that, therefore, he will not deprive himself of it except for substantial advantages in his bargain with foreign countries. Though the important exchange problem still remains to be settled, it must be stated that 1933-34 closed in a better atmosphere than that in which it began.

Foreign trade was better during the year under review than in 1932-33, though imports and exports taken together show a fall from the figures of the previous year. It is a matter for gratification that the export trade showed a marked expansion during this year, though such expansion was accompanied by a fall in imports. Exports of Indian merchandise during the year under review was Rs. 146.31 crores against Rs. 132.43 crores in 1932-33. Re-exports had their share of the improvement and amounted to Rs. 3.42 crores against Rs. 3.22 crores the year before. For various reasons the import trade shrank from Rs. 132.27 crores to Rs. 115.02 crores. There were many causes operating towards this end. It must be remembered at first that throughout the years of the depression the import trade into India had not contracted to the same extent as exports ; and the significance of the shrinkage during the year under review should not therefore be exaggerated. Secondly, the year 1933-34 was a year in which the full effects of the protectionist policy were felt. Not only was the import of sugar reduced, but there was also an abatement of the inrush of Japanese cotton goods into India.

The improvement of about Rs. 25½ crores in the visible balance of trade has thus been due to an expansion in our exports and a decline of about Rs. 18 crores in our imports from abroad. The balance of trade in merchandise, therefore, rose from Rs. 3 lakhs in 1932-33 to Rs. 33.26 crores which is a little over one-third of the average of the post-War decade. As for transactions in treasure, the year showed a fall of Rs. 8½ crores in India's exports of gold and a decline of nearly Rs. ¾ crores in the imports of silver. As the total at the end of this section shows, the remittances by Government increased from Rs. 48.18 crores to Rs. 59.97 crores. It is well-known that the rupee exchange was so well maintained throughout the year, that there was at no time the necessity of selling sterling at the lower gold point. The net balance of remittances of funds came to Rs. 60.44 crores ; and taken together with the total visible balance of trade of Rs. 91.94 crores, the total visible balance of accounts during the year was in favour of India to the extent of Rs. 30.05 crores, which marks an increase of 84 per cent. over the previous year. If account is also taken of the Rs. 97 lakhs of net payments in India of British postal orders and of foreign money orders of about Rs. 11 lakhs, as also Government transfers on account of Iraq and Mauritius amounting to Rs. 86 lakhs, the net balance may be put at Rs. 29.08 lakhs.

It need hardly be added that these figures are compiled only from such statistics as are available and that they are no measure of the balance of payments between India and foreign countries. For in such a balancing, other forms of invisible imports and exports would have to figure, and such invisible imports and exports have been difficult to

compile even in the more advanced nations of the West. But the statistics provided in this section afford a reliable guidance to the understanding of the position of the rupee during the year under review.

It has been already mentioned that the exports of gold to India during 1933-34 show a decline of about Rs. 8½ crores from the exports of the previous year. This should need no lengthy explanation, especially for those who have been feeling that the stream of gold exports from India must run dry before long. In such a view what should be surprising is that gold exports have continued in such measure rather than that they have shown any decline. Apart from this, it must be remembered that the metal exported during 1932-33 came from sources ready to avail themselves of the advantages offered by the higher prices ruling abroad. Though during the year under review the sterling price often showed sensational increases, Indian gold did not move forward in the same volume to take advantage of such enterprise except at the time of the revaluation of the dollar. Presumably, greater difficulty is being experienced in securing gold from upcountry areas.

It is necessary to point out that throughout 1933-34 the London price of gold was fixed in relation to the sterling-franc rate, and with little or no reference to the sterling-dollar rate. For it will be remembered that for all practical purposes America abandoned the gold standard in February 1933 and a formal return thereto was not accomplished till the end of January 1934. Even after such return practical difficulties supervened in the way of an organic relation being restored between the statutory rate in America and the price of gold in London, so that during the whole of the period under review the London price of gold was fixed in relation to the sterling-franc rate and it was only in May 1934 that for the first time after February 1933 the London price was fixed with reference to the sterling-dollar rate. Even in the period before January 31, 1934, it is important to note that the price of gold, though it necessarily had a relation to the sterling-franc rate, was not altogether determined by it. For throughout this period the sterling price of gold left an appreciable premium over the price justified by the franc exchange. This was due to the anxiety of foreigners to maintain their funds in London in the form of gold. The meeting of the World Economic Conference proved to be the beginning of the anxiety that the gold standard countries might be forced to abandon gold and devalue their currencies. As by this time confidence in sterling had been restored and the law in England provided special safeguards for the gold holdings of foreigners, there was a large-scale inflow of gold into London and the maintenance of such inflow meant that gold would command a premium, which at times rose as high as 1 sh. ; would be available in the London market.

The Tables on pages —— give the London price of gold and the relevant exchange rates during the year ; and it will be seen therefrom that the lower quotation of £5-12-9 was touched in May 1933 and the highest was £7 in February 1934, which was due to the revaluation of the dollar at 59.06 cents. The net export of gold during the year from India was 6,695,000 ounces valued at Rs. 57.05 crores against 8,354,000 ounces valued at Rs. 65.52 crores in the previous year. The gold tendered on private account in the Bombay Mint for refining from Indian mines amounted to 977,139 tolas, the value of which on the same basis may be taken as Rs. 205 lakhs.

GOVERNMENT OF INDIA LOANS

Rupee Loan.—Flotation :—The new loan took the form of a 3½ per cent. issue liable to income-tax. The loan is repayable at par not later than the 15th November, 1950 and not earlier than the 15th November, 1947. The loan consisted of two sections, namely, "Cash" and "Conversion." Subscriptions to the "Cash Section" were payable in the form of :—

(*i*) cash ;

(*ii*) treasury bills maturing not later than the 10th May, 1933, accepted at their face value ;

(*iii*) securities of the 4 per cent. conversion loan of 1916-17 and 5 per cent. Bonds, 1933 and 6 per cent. Bonds, 1933-36, accepted at a premium of annas 12 per cent.

the issue price reckoned at Rs. 96 per cent. Subscriptions to the "Conversion Section," were in the form of the following securities, namely, 4½ per cent. Bonds, 1934, 5 per cent. Bonds, 1935 and 6½ per cent. Treasury Bonds, 1935. For every Rs. 100 (nominal value) of any of the above three loans tendered for conversion, the applicant received Rs. 100 (nominal value) of the new loan, and in addition a cash bonus of Rs. 6-2, Rs. 8 and Rs. 11-8 respectively according as the conversions were of the 4½ per cent., 5 per cent. or 6½ per cent. loans.

The loan opened for subscriptions on

the 28th April, 1933. The loan notification provided that the "Cash" and "Conversion" sections of the loan should not remain open after the 29th April and the 2nd May, 1933 respectively, but that either section would be closed without notice as soon as it appeared that the subscriptions to it had reached a total of Rs. 15 crores (nominal) approximately. It was also provided in the notification that if subscriptions to the "Cash" section happened to exceed the above limit, partial allotment would be made and that, in making such allotment, subscriptions in the form of securities of the 4 per cent. Conversion Loan of 1916-17 would be accepted in full and preference would then be given first to subscriptions in cash and next to those in the form of Treasury Bills over subscriptions in the other forms. The "Cash" Section of the loan was closed within about two hours from opening and applications in the form of securities of the 4 per cent. Conversion Loan of 1916-17 and Cash were accepted in full, the applications in other forms being rejected. The "Conversion" Section of the loan was closed on the 2nd May. At the time of announcement of this loan, he securities market was firm and money conditions were very easy. The loan met with a very good reception, and, in the few days intervening between the announcement and the opening of the lists, long term securities registered an appreciable rise, 3½ per cent. paper and the 4 per cent. Loan, 1960-70 recording an improvement of nearly 1½ points. The new loan was quoted at a premium even before the lists opened, and, as was inticipated, the cash section of the loan had to be closed in less than a couple of hours.

But all the progress that was made up to then was wiped out by the Himalayan blunder which Government committed of closing the lists for the loan within a couple of hours and making full allotment to subscribers. There was naturally a rush of selling and prices tumbled down. The consequent loss of confidence has not been made good to this day though at the close of the financial year 3½ per cent. 1947-50 rose up to Rs. 97-12, a premium of Re. 1-12 over the issue price.

The total amount of loan issued was 30,82 lakhs of which 15,60 lakhs were subscribed in the cash section (10,07 lakhs in cash and the balance by tender of 1916-17 loan) and 15,22 lakhs in the conversion section. As a result of the above conversion operations Government have been able to reduce their liabilities for the redemption of loans during the next two years by Rs. 15,22 lakhs and, in addition, have converted Rs. 5,31 lakhs of the 4 per cent. conversion loan of 1916-17, which would otherwise have had to be repaid in cash during the year.

Sterling loan.—Flotation: The first loan was a 4 per cent. Stock, 1948-53. It was issued in May, 1933 at 97½ per cent. for a total amount of £12,000,000. The stock is repayable at par on the 15th December, 1953 but either the whole of the stock or part thereof is redeemable by drawings or otherwise at par on any half yearly interest date after the 15th December, 1948 with three calendar months' previous notice. There were 6,984 applications for a total amount of £47,140,900 stock. Applications for amounts upto £300 stock received £100 and larger applications received allotments of 25 per cent. The next loan took the form of a 3½ per cent. Stock, 1954-59, issued in November, 1933 at 97 per cent. for a total amount of £10,000,000. The stock is repayable at par on the 15th December, 1959, but the stock is redeemable in whole or in part at par by drawings or otherwise on any half-yearly interest date after the 15th December, 1954. There were 5,474 applications for a total amount of £18,644,300. Applications for amounts up to £200 Stock were allotted in full, £300 and upwards received partial above £1,000 about 52,23 per cent.
allotment; £1,000 receiving £600 and

The 6 per cent. Bonds, 1933-35 and 1933-34, the outstanding balances of which were £2.6 millions and £10 millions respectively were repaid on the 15th June and 15th December, 1933.

The Government of the Punjab floated a loan in August in the form of 4 per cent. Bonds, 1948, amounting to Rs. 3¼ crores of which 1¾ crores were subscribed in cash and the balance by tender of their 6¼ per cent. Bonds, 1933. The balance of 1933 Bonds left after the conversion was repaid in October.

Balance of Trade in India from 1923-24 to 1933-34.

(In Lakhs of Rs.)

	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Exports of Indian Merchandise (private)	+ 3,48,84	+ 3,84,66	+ 3,74,84	+ 3,01,44	+ 3,19,15	+ 3,30,13	+ 3,10,80	+ 2,20,49	+ 1,55,89	+ 1,32,43	+ 1,46,81
Re-exports of foreign	+ 13,07	+ 13,51	+ 10,49	+ 8,01	+ 9,54	+ 7,83	+ 7,13	+ 5,15	+ 4,66	− 3,22	+ 3,42
Imports of foreign	− 2,17,03	− 2,43,16	− 2,24,20	− 2,29,98	− 2,46,71	− 2,51,49	+ 2,38,95	− 1,63,61	− 1,25,69	− 1,32,27	− 1,15,02
Balance of trade in Merchandise ...	+ 1,44,88	+ 1,55,01	+ 1,61,13	+ 79,47	+ 81,98	+ 86,47	+ 78,98	+ 62,03	+ 34,86	+ 3,38	+ 34,71
Gold (private)	− 29,19	− 73,93	− 34,85	− 19,40	− 18,10	− 21,20	− 14,22	− 12,75	+ 57,97	+ 65,52	+ 57,05
Silver (,,)	− 18,38	− 20,06	− 17,15	− 19,79	− 13,85	− 13,04	− 11,89	− 11,65	− 2,59	− 73	− 1
Currency Notes (private) ...	− 1,08	− 28	+ 12	− 14	− 24	− 12	− 9	− 3	+ 26	+ 13	+ 19
Balance of transaction in Treasure (private)	− 48,65	− 94,27	− 51,88	− 39,33	− 32,19	− 34,36	− 26,20	− 24,43	+ 55,64	+ 64,92	+ 57,23
Tota Visible Balance of Trade ...	+ 96,23	+ 60,74	+ 1,09,25	+ 40,14	+ 49,79	+ 52,11	+ 52,78	+ 37,60	+ 90,50	+ 68,30	+ 91,94
Council Bills, purchases of Sterling and other Government remittances to the United Kingdom	− 33,39	− 56,35	− 61,24	− 2,82	− 37,77	− 41,02	− 20,39	− 7,26	− 53,04	− 48,18	− 59,07
Sterling transfers on London sold in India	...	...	...	+ 1,93	...	...	...	+ 7,75	+ 18,98	...	...
Transfers of Government Securities	− 35	− 38	− 1,27	+ 3	+ 28	− 1	− 29	− 8	+ 6	− 13	− 11
Interest drafts on India in respect of Government of India Securities	− 44	− 41	− 36	− 34	− 35	− 36	− 33	− 33	− 32	− 32	− 36
Balance of remittance of funds ...	− 34,18	− 57,14	− 62,87	− 1,20	− 37,84	− 41,39	− 21,01	+ 8	− 34,32	− 48,63	− 60,44
Total Visible Balance of Accounts	+ 62,05	+ 3,60	+ 46,38	+ 38,94	+ 11,95	+ 10,72	+ 31,77	+ 37,68	+ 56,18	+ 19,67	+ 31,50

NOTE—(1) Imports of merchandise are exclusive of railway materials imported direct by State Railways working under Company management, as the charges of these are not paid for in the ordinary way.
(2) In the balances, + means net Export and − net Import.
(3) All transactions which do not enter into the balance of trade are excluded.

Monthly Exports and Imports into India of Gold from 1928-29 to 1933-34

(In Thousands of Rupees)

	1928-29		1929-30		1930-31		1931-32		1932-33		1933-34	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
April	2,30,00	82	1,83.25	48	1,63,40	29	16,45	...	11,50	4,23,78	6,13	4,55,59
May	2,40,67	...	1,68,77	...	1,76,78	..	19,06	...	7,13	3,30,42	10,24	5,21,92
June	1,73.28	...	99,26	4	2,52,16	1	16,04	64,03	8,63	4,87,02	18,34	5,62,50
July	59,26	16	1,15,66	...	93,25	...	20,67	42,67	10,69	6,17,04	8,46	2,59,75
August	83,25	9	77,31	35	3,68,82	3	21,57	28,95	12,95	4,51,53	8,99	4,46,30
September	46.83	17	94,17	...	97,74	...	31,00	29,29	9,36	6,56,50	8,28	5,70,11
October	1,28,08	18	87,39	1	26.48	...	49,27	9,05,44	10,98	5,67,39	8,64	3,43,55
November	1,78,52	4	1,22,44	...	36.24	...	27,02	8,57,45	14,27	6,71,75	7,13	2,53,23
December	2,73,43	15	1,27.91	5	23.22	4,54	27,94	17,76,53	16,09	10,13,26	10,56	2,42,07
January	1,31,48	8	1,47,21	10	24,53	32,37	20,11	9.27,38	12,74	4,71,22	7,13	5,92,68
February	2,13,90	..	1,05,31	...	24,11	...	13,92	7,57,12	7,25	4,95,89	11,21	10,21,62
March	3,63.20	33	94,43	...	37,93	12,10	14.90	6.88,37	10,22	4,98,29	9,83	5,45,98
TOTAL ...	21,21,90	2,02	14,23.11	1,03	13,24,66	49,34	79,95	60,77,23	1,31,81	66,84,09	1,09,94	58,15,80

NOTE—Value is at the market rate at the time of Import or Export and the metal is of unknown fineness.

Monthly Exports from and Imports into India of Silver from 1928-29 to 1933-34

(In Thousands of Rupees)

	1928-29		1929-30		1930-31		1931-32		1932-33		1933-34	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
April	1,40,79	3,20	87,80	79.77	1.44,67	21,77	46,20	28	9,68	5,46	7,47	350
May	1,17,30	56,88	1,15,17	26,31	1,54,34	7,40	50,80	27	19,05	3,26	11.00	48,51
June	1,53,91	1,98,93	1,26,51	49,84	1,23.18	1,02	54,06	23,40	26,53	25,99	77	1,90,53
July	3,89,29	75,32	94,18	25,80	94,44	1,12	36,35	73,68	42,26	9,14	30	1,99,32
August	1,41,60	27,34	1,03,77	24,70	1,44,73	80,34	28,63	84,47	14,35	71,96	2,59	22,55
September	90,92	66,27	76,01	35.14	65,28	49,03	54,00	84,41	10,06	28,75	5,99	29,35
October	1,08,50	27,42	88,74	22,32	11,75	55,99	47,05	12,95	3,07	30,79	13,53	72,42
November	96,54	32,88	1,03,30	41,26	43,81	19,01	30,49	9,04	8,54	68,40	11,93	5,51
December	57,75	82,32	63,35	73,81	35,57	51,42	67,96	43,47	4,77	19,02	10.96	27,20
January	1,14,54	12,15	1,07,83	33,82	1,03,53	19,78	16,50	77,39	9,59	67,87	4,92	41,65
February	1,24,75	1,12	2,45,10	25,47	3,51,31	16,24	6,41	64,77	7,03	26,84	8,40	16,04
March	56,29	31,28	1,30,15	41,35	74,00	15,57	4,19	10,68	8,02	6,78	3,87	60,86
TOTAL ...	15,92,18	6,15,11	13,41,91	4,79,79	13,46,61	3,38,69	4,42,64	4.84,81	1,62,95	3,64,26	81,73	7,17,44

Note—Value is at the market rate at the time of Export or Import and the metal is of unknown fineness.

Total Imports and Exports of Silver and Gold for each of the years 1900-01 to 1933-34.

(Value in Thousands of Rupees)

	Gold		Silver	
	Imports	Exports	Imports	Exports
	Rs.	Rs.	Rs.	Rs.
1900-01	11,89,80	11,05,59	12,67,87	3,17,15
1901-02	8,30,75	6,36,99	12,29,38	5,10,10
1902-03	13,19,24	4,43,78	12,18,65	5,22,98
1903-04	20,14,79	10,21,62	18,37,82	4,82,77
1904-05	21,81,20	12,10.61	17,69,62	4,32,27
1905-06	14,75,90	14,29,10	16,90,20	1,17,90
1906-07	18,53,34	3,67,73	26,04,64	2,04,09
1907-08	20,75,26	3.38,49	21,53,19	2,06,36
1908-09	8,40.42	4,04,88	14,34,00	2,27,15
1909-10	25,03,10	3,35,17	12,49,25	3,04,75
1910-11	27,89,25	3,91.39	11,84,34	3,21,31
1911-12	41,49,36	3,73,38	11,97,72	6,64,01
1912-13	41,29,08	7,28,96	20,54,10	3,34,22
1913-14	28,22,64	4,90,26	15,21,32	2,18,03
1914-15	10,70,38	3,05,64	11,10,45	2,23,30
1915-16	5,28,17	5,39,08	6.66,46	1.83,50
1916-17	13,33,79	10,25	25,11,48	6,31,47
1917-18	29,09,49	3,91,63	22,66,94	3,62,76
1918-19	2,27,63	7,84,00	69,08,92	1,17,02
1919-20	48,25,16	12,92,13	29,98,73	75,84
1920 21	23,57,38	21,46,56	11,11,82	4,70,57
1921-22	13,82,04	16,48,49	17,47,86	2,38,24
1922-23	41,32,39	13,31	20,94,33	2,58,86
1923-24	20,25,31	6,68	22,10,27	3,40,47
1924-25	74,28,98	36,32	24,28,07	4,20,67
1925-26	35,22,99	37,54	19,89,70	2,77,29
1926-27	19,50,12	10,07	21,76,34	1,89,54
1927-28	18,13,34	3,44	16,47,37	2,63,69
1928-29	21,21,90	2,03	15,92,18	6,15,11
1929-30	14,23,11	1,03	13,41,91	4,79,79
1930-31	13,24.66	49,34	13,46,63	3,38,70
1931-32	2,79,95	60,77,23	4,42,64	4,84,81
1932-33	1,81,81	66,84,09	1,62,95	3,64,26
1933-34	1,09.94	58,15,30	81,73	7,17,44

London-New York Cross Rate (£ per 100 dollars), Sterling-Franc rate Price of Gold in London and in Bombay.

	London-New York cross rate dollars to pound sterling		Starling-Franc rate Francs to Pound		Price of gold in London						Price of country bar gold at Bombay					
					Highest			Lowest			Highest			Lowest		
	Highest	Lowest	Highest	Lowest	£	s.	d.	£	s.	d.	Rs.	A.	P.	Rs.	A.	P.
April 1933 ...	386¾	341⁵⁄₁₆	90	85¾	6	2	6	5	18	0	30	0	0	29	2	6
May ,, ...	400	387½	86⁷⁄₁₆	83⁷⁄₁₆	6	4	8	5	12	9	30	12	9	30	5	0
June ,, ...	438¼	339⅜	86⅞	85¼	6	2	6	6	2	0	30	6	6	30	2	3
July ,, ...	483⅞	431¾	86⅜	84¹¹⁄₁₆	6	4	10	6	2	4½	31	0	0	30	7	3
August ,, ...	462	440	85⅛	81¹⁄₁₆	6	9	4½	6	4	0	32	3	0	30	12	0
September ,, ...	481	452⅝	83¼	78¹¹⁄₁₆	6	13	9	6	7	7	33	0	6	31	11	9
October ,, ...	478¾	450½	83⅜	77¹⁵⁄₁₆	6	14	8	6	8	1	33	3	9	32	2	6
November ,, ...	548¼	479¾	84⅝	79⁹⁄₁₆	6	13	3	6	5	3½	33	1	0	31	4	0
December ,, ...	518¾	501⅜	84¹¹⁄₁₆	82³⁄₁₆	6	7	0	6	4	8	31	8	0	31	1	0
January 1934 ...	515	495¼	83½	79⁷⁄₁₆	6	12	11	6	6	6	32	14	0	31	4	6
February ,, ...	513⁹⁄₁₆	490½	79⅞	76¹⁵⁄₁₆	7	0	0	6	13	1	34	11	0	33	6	3
March ,, ...		506¾	77¾	76¹⁵⁄₁₆	6	17	7	6	16	0	34	0	3	33	10	6

Price of Silver—Bombay (per 100 tolas country bar), London (per Standard ounce) and New York (per fine ounce) for 1928-29 to 1933-34

1928-29

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	60	5	58	13	26 15/16	26¼	58½	57
May ...	65	7	60	2	28¾	26¾	63⅝	58¼
June ...	62	15	60	12	28 1/16	27⅛	61¾	59½
July ...	62	8	61	2	27½	27 1/16	59⅞	58⅜
August ...	61	11	60	3	27 5/16	26 11/16	59¼	59⅜
September	59	15	58	6	26 11/16	26⅛	57⅞	56⅞
October ...	60	2	59	2	26 15/16	26 5/16	58¾	57⅝
November	59	14	59	4	26 13/16	26 9/16	58¼	57⅝
December	59	6	58	10	26 9/16	26 3/16	57⅞	56⅞
January...	59	2	58	6	26⅞	26	57½	56½
February	58	13	57	12	26 5/16	25 5/16	56¾	55⅝
March ...	59	0	58	0	26⅛	25⅞	56⅝	56½

1929-30

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	58	13	56	12	25 15/16	25 3/16	56¼	54⅝
May ...	57	6	56	2	25½	24 9/16	53	53⅛
June ...	55	12	54	11	24½	24	53	51⅝
July ...	56	6	54	8	24 13/16	23 15/16	53½	51⅞
August ...	55	5	54	12	24 7/16	24⅛	52⅛	52¼
September	54	14	52	12	24 3/16	23 3/16	52¼	50⅛
October ...	52	11	51	11	23¼	22 15/16	50¼	49⅞
November	51	14	51	2	22 15/16	22¼	50	49¼
December	51	4	48	4	22 11/16	21½	49⅜	46¾
January...	50	4	46	8	21⅝	20	46⅞	43¾
February	49	6	46	7	20 7/16	19⅛	44	42¼
March ...	53	0	51	12	20	18 5/16	43⅛	39⅝

1930-31

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	56	14	52	15	19 13/16	19 3/16	42⅞	41⅝
May ...	55	13	49	7	19 9/16	17 7/16	42½	37¼
June ...	49	3	44	4	16⅞	15 7/16	37¼	33¼
July ...	46	14	45	5	16 7/16	15 5/16	35¾	33½
August ...	47	9	45	14	16⅞	15⅞	36¼	34¼
September	47	14	46	4	17	16 7/16	37	35½
October ...	47	5	46	10	16 13/16	16⅜	36⅛	35½
November	47	8	46	6	16 13/16	16 5/16	36½	35⅜
December	46	5	43	0	16 3/16	14½	35⅛	11¼
January...	43	7	40	12	14 7/16	13 3/16	31¼	28½
February	43	4	38	10	13¼	12⅛	28⅝	25¾
March ...	45	5	41	5	14½	12⅝	31⅜	27

Price of Silver—Bombay (per 100 tolas country bar,) London (per Standard ounce) and New York (per fine ounce) for 1928-29 to 1933-34—*Contd.*

1931-32

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	43	14	41	11	13½	12⅝	29¼	27¼
May ...	43	10	41	15	13¼	12⅛	28⅜	26
June ...	44	12	41	6	13 13/16	12¼	29½	26¼
July ...	44	10	42	14	13¾	12 5/16	29¾	27⅜
August ...	44	0	42	11	13⅛	12 9/16	28¼	27⅛
September	57	8	42	13	16⅜	12¾	31	27½
October ...	57	8	52	12	18 3/16	15 15/16	30⅝	27½
November	65	14	57	8	21 9/16	18	37¼	29¾
December	63	8	60	6	20 11/16	19⅛	31⅝	28⅜
January ...	62	4	60	4	20 7/16	18 15/16	30⅜	29¼
February	60	4	60	4	20	19¼	31	29½
March ...	56	14	54	4	19¾	17½	31	29

1932-33

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	55	12	52	8	17½	15⅝	29¾	27⅞
May ...	56	6	54	6	17⅜	16 9/16	28⅛	27
June ...	56	11	54	8	17	16⅝	21⅛	26¾
July ...	55	2	54	3	17¼	16 9/16	27	26⅛
August ...	57	7	54	13	18 15/16	17 3/16	30	26¾
September	57	4	55	1	18 13/16	17 9/16	28⅝	27⅜
October ...	56	10	55	12	18⅛	17 11/16	27½	26⅝
November	56	10	53	15	18⅜	17 13/16	27⅜	25⅜
December	52	9	49	5	17¾	16⅜	25½	24¼
January ...	51	6	49	4	17⅛	15 15/16	26¼	24⅜
February	53	4	49	7	17 5/16	16 9/16	27¼	25½
March ...	58	4	53	7	18 7/16	17	30	26½

1933-34

Month	Bombay Highest Rs.	Bombay Highest A.	Bombay Lowest Rs.	Bombay Lowest A.	London Highest d.	London Lowest d.	New York Highest Cents	New York Lowest Cents
April ...	59	0	54	14	20 7/16	17¼	37¼	27
May ...	59	0	55	15	20½	18 3/16	36¼	32⅛
June ...	58	2	56	11	19 9/16	18⅜	36¼	34¾
July ...	57	7	55	13	18⅞	17⅞	40⅜	35½
August ...	56	5	54	10	18⅛	17¾	37	35
September	56	12	55	7	18½	18 1/16	40½	36⅝
October ...	56	9	56	0	18½	18	40	36⅛
November	57	0	56	4	18⅝	18 1/16	45	39⅜
December	56	7	53	6	19 1/16	18 7/16	44⅜	42½
January ...	55	9	53	15	19 11/16	19 1/16	45	43¼
February	56	14	54	7	20⅝	19¼	46¾	43⅜
March ...	57	3	54	15	20¾	19⅞	46¾	45⅛

Monthly rates for Telegraphic Transfers (Calcutta—London) from 1928-29 to 1933-34.

(Pence per Rupee)

	1928-29		1929-30		1930-31		1931-32		1932-33		1933-34	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
April ...	17 31/32	17 31/32	17 31/32	17 29/32	17 13/16	17 13/16	17 13/16	17 25/32	18 1/32	17 29/32	18 1/32	17 31/32
May ...	17 31/32	17 31/32	17 29/32	17 29/32	17 13/16	17 25/32	17 27/32	17 25/32	17 15/16	17 7/8	18 1/16	18 1/32
June ...	17 31/32	17 27/32	17 7/8	17 13/16	17 13/16	17 25/32	17 25/32	17 3/4	17 15/16	17 7/8	18 1/32	18 1/32
July ...	17 7/8	17 27/32	17 15/16	17 25/32	17 13/16	17 3/4	17 13/16	17 3/4	18 1/16	18	18 1/32	18 1/32
August ...	17 31/32	17 7/8	17 27/32	17 3/4	17 25/32	17 3/4	17 3/4	17 3/4	18 3/32	18 1/16	18 1/32	18 1/32
September ...	18	17 15/16	17 27/32	17 13/16	17 25/32	17 3/4	17 3/4	17 3/4	18 5/32	18 3/32	18 1/32	17 15/16
October ...	18 1/16	18	17 29/32	17 13/16	17 13/16	17 25/32	18 1/32	17 3/4	18 5/32	18 1/8	18 1/32	17 31/32
November ...	18 1/16	18 1/32	17 7/8	17 13/16	17 25/32	17 3/4	18 5/32	18 1/32	18 5/32	18 1/8	18	17 13/16
December ...	18 1/32	18 1/32	17 29/32	17 7/8	17 3/4	17 3/4	18 1/8	18 1/32	18 5/32	18 5/32	18 1/32	17 15/16
January ...	18 1/32	18	17 15/16	17 7/8	17 3/4	17 3/4	18 1/8	18 1/16	18 5/32	18 1/8	18 1/16	18 1/32
February ...	18	17 15/16	17 7/8	17 27/32	17 3/4	17 3/4	18 1/8	18 3/32	18 1/8	18 3/32	18 1/16	18 1/32
March ...	17 31/32	17 31/32	17 27/32	17 13/16	17 7/8	17 3/4	18 1/8	18 3/32	18 5/32	17 7/8	18 1/16	18 1/16

Monthly Purchase of Sterling from 1928-29 to 1933-34.

	1928-29		1929-30		1930-31		1931-32		1932-33		1933-34	
	Amount Thousand £	Average rate per rupee d.	Amount Thousand £	Average rate per rupee d.	Amount Thousand £	Average rate per rupee d.	Amount Thousand £	Average rate per rupee d.	Amount Thousand £	Average rate per reupee d.	Amount Thousand £	Average rate per rupee d.
April ...	3,670	18	280	18	2,680	17·84	...	...	223	18·12	2,668	18·06
May ...	4,405	18	...	...	2,640	17·84	...	...	...	...	5,075	18·07
June ...	700	18	30	17·88	...	...	...	...	...	...	3,685	18·06
July ...	...	...	...	...	...	...	...	...	...	...	3,250	18·06
August ...	...	...	1,985	17·88	...	...	...	...	3,165	18·10	3,113	18·06
September ...	1,195	18	1,045	17·88	...	...	...	...	5,879	18·15	770	18·06
October ...	4,585	18·05	2,180	17·88	25	17·81	219	18·10	4,345	18·16	1,800	18·06
November ...	3,060	18·06	1,255	17·89	650	17·81	5,508	18·13	8,275	18·17	...	...
December ...	3,433	18·06	7,725	17·93	...	...	13,854	18·12	7,686	18·17	1,380	18·06
January ...	1,978	18·06	190	17·95	...	...	7,133	18·11	3,754	18·16	7,633	18·08
February ...	3,865	18·01	525	17·91	...	...	7,126	18·13	1,355	18·16	8,695	18·08
March ...	3,919	18	...	...	...	...	6,209	18·13	1,050	18·10	7,089	18·07
TOTAL ...	30,810	...	15,215	...	5,395	...	40,049	...	35,733	...	45,158	...

Summary of Ways and Means transactions of the Government of India in India

(In Crores of Rupees)

Disbursements

Disbursements	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Defence services	38·85	38·10	37·95	36·11	33·14	31·80
Drawings by Iraq Covernment ...	·97	·78	·85	·86	·20	·78
Capital outlay on Delhi, Security Printing, etc.	·72	1·05	3·02	·59	·41	·60
Remittances from India to London						
(*i*) By purchase of Sterling ...	37·52	20·89	7·26	58·43	47·90	59·97
(*ii*) By withdrawal from the P, C. R. in London against opposite payment in India ...		15·77	2·84			
(*iii*) By withdrawal from the G. S. R. in London against opposite payment in India ...			9·29	30·78		
(*iv*) By Sterling taken over ... in London					·95	
Cancellation of Indian Treasury Bills in the P. C. R.		11·75	28·62		20·65	28·69
Net discharges of Treasury Bills (Public)	3·59	...		7·84	21·44	
Sinking Fund purchases ...		·33	1·97	3·41	·52	
Silver withdrawn from the P. C. R. against contraction		2·94				
Post and Telegraphs issue (excluding receipts from Cash Certificates)	·21	·42	5·96	2·12		
Other items	1·09	3·55				
Reduction in the balances of Provincial Governments	2·59	6·05	7·55	1·13		
Repayment of Ways and Means Advances from the Imperial Bank					9·50	
Permanent debt discharged (net)						11·03
Increase in Treasury balance (including investments) ...		16·50		·32	2·70	
TOTAL ...	85·54	117·63	104·81	136·54	137·41	127·87

Receipts

Receipts	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Excess of civil revenue over civil expenditure	44·51	48·67	32·71	34·10	45·44	40·88
Excess of railway receipts over issues	21·60	21·00	20·02	22·29	28·96	32·60
Cash Certificates (net receipts) ...	1·60	2·70	3·44	6·16	11·05	8·08
Permanent Debt incurred ...	16·53	13·22	12·18	5·96	22·32	...
Ways and Means Advances from the Imperial Bank of India ...	...	...	...	9·50	...	...
Sale of Sterling	...	...	7·75	18·98	...	...
Sale of Treasury Bills to the public (net)	...	32·04	19·34	...	...	7·22
Issue of Treasury Bills to the P.C.R.	1·00	...	...	...	...	...
Other items	...	...	1·08	...	3·06	...
Post & Telegraphs receipts (net) ...	..	...	...	...	1·35	4·24
Decrease in Treasury balances (including investments) ...	·30	...	8·29	5·05	...	8·41
Net addition to balances of Provincial Governments ...	...	...	...	...	6·53	5·32
Withdrawal from G. S. R. in India against opposite Payment in England	...	...	...	...	20·70	15·50
Do. P.C.R.	...	...	...	...	...	8·25
Expansion against Indian Treasury Bills issued to P. C. R. ...	...	...	...	34·50	...	...
Other items	...	...	...	...	...	2·37
TOTAL ...	85·54	117·63	104·81	136·54	137·41	127·87

Monthly Sales and Discharges of Treasury Bills, 1929-30 to 1933-34

(In Lakhs of Rs.)

Month	1929-30		1930-31		1931-32		1932-33		1933-34	
	Sales	Discharges	Sales	Discharges	Sales	Discharges	Sales	Discharges	Sales	Discharges
April ...	5,72	3,56	7,77	4,60	26,54	22,86	21,78	15,95	8,43	10,04
May ...	4,24	43	12,90	4,95	24,26	9,55	13,97	15,84	8,79	8,56
June ...	...	38	14,23	10,02	18,75	17,07	6,00	12,74	9,46	7,45
July ...	...	1,06	10,28	11,96	19,69	11,89	16,71	22,19	9,83	3,48
August ...	9,83	2,02	12,92	15,34	16,79	15,79	5,77	15,97	9,51	8,77
September	10,43	...	20,60	18,80	9,76	19,24	10,82	6,36	13,35	10,46
October	1,05	...	18,27	9,74	19,14	31,27	8,82	3,32	6,57	8,88
November	5,12	11,25	9,71	9,48	17,51	17,76	7,27	1	10,55	9,50
December	5,26	3,16	10,10	15,51	8,25	10,17	4,50	1	12,39	13,85
January ...	5,77	5,47	12,80	10,13	13,25	20,91	10,12	29,54	7,50	6,49
February	5,32	10,18	8,20	12,72	16,38	20,93	8,42	10,21	7,06	12,91
March ...	11,99	6.34	21,26	16,42	10,95	11,65	7,45	10,87	18,68	10,07

* Only Estimates

Composition of the Gold Standard Reserve on the 31st March of each of the years 1929-30 to 1933-34.

(Figures in £)

31st March		1929-30	1930-31	1931-32	1932-33	1933 34
Cash at the Bank of England ...		3,748	1,085	29	897	568
British Treasury Bills and other British and Dominion Government Securities		37,843,918	31,599,381	10,694,637	26,220,796	37,847,098
Gold	In England	2,152,334	2,152,334	2,152,334	2,152,334	2,152,334
	In India	...	6,247,200	27,153,000	11,626,000	...
TOTAL		40,000,000	40,660,000	40,000,000	40,000,000	40,000,000

Balance of the Government of India with the Treasuries and the Imperial Bank of India

(In Lakhs of Rupees)

At the end of	1929 30		1930-31		1931-32		1932-33		1933-34	
	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank
April	2,56	9,27	2,61	17,51	2,64	12,15	2,12	7,15	2,41	14,66
May	2,46	8,43	2,43	15,15	2,23	17,31	2,08	7,44	2,28	7,13
June	3,19	20,62	2,17	13,72	2,22	15,73	2,07	18,94	2,12	5,67
July	2,28	13,80	2,10	22,69	2,26	21,13	2,03	19,46	1,98	9,26
August	3,03	14,05	2.38	16,43	2,41	19,45	1,94	13,94	1,95	8,78
September ...	2,73	20,65	1,96	12,48	2,27	8,86	2,06	13,83	2,05	7,11
October	2,19	13,17	2,08	15,19	2,17	8,44	1,81	8,26	2,15	6,11
November ...	2,42	13,67	2,07	8,70	2,25	7,29	2,05	5,95	1,99	7,09
December ...	2,21	7,45	2,07	7.19	2,04	8,06	1,94	6,84	2,08	6,24
January	2,45	17,26	2,33	8,17	2,07	6,85	2,19	8,38	2,14	7,25
February ...	2,89	17,95	2,81	7,51	2,26	7,78	2,40	7,08	2,48	7,23
March	3,64	22,12	3,80	13,49	4,55	8,13	3,71	11,02	3,99	7,90

Amounts and Distribution of Treasury Balances and Reserves of the Government of India, 1929-30 to 1933-34.

(In Lakes of Rupees)

	1929-30		1930-31		1931-32		1932-33		1933-34	
	Opening Balance	Colsing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance
Treasury Balance ...	16,19	34,27	34,27	24,69	24,69	33,84	33,84	27,78	27,78	32,77
Paper Currency Reserve :—										
Silver ...	99,89	1,10,96	1,10,96	1,24,80	1,24,80	1,11,19	1,11,19	1,11,86	1,11,86	97,99
Gold ...	32,22	32,27	32,27	25,85	25,85	5,26	5,29	25,99	25,99	41,53
Securities	43,23	33,85	33,85	10,19	10,19	57,94	57,94	39,05	39,05	37,70
Gold Standard Reserve :—										
Gold ...	2,87	2,87	2,87	11,20	11,20	39,07	39,07	18,87	18,87	2,87
Securities	50,46	50,46	50,46	42,13	42,13	14,26	14,26	34,96	34,96	50,46

Monthly Expansions (+) and Contractions (–) of Currency 1928-29 to 1933-34.

(In Lakhs of Rupees)

Month	1928-29					1929-30						1930-31				
	Sterling Securities	Securities of the Government of India	Advance to the Imperial Bank	Gold	Total	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	Gold	Silver (against uncurrent coin)	Total	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	Gold	Total
April	..	...	+50	...	+50	–2,00	...	–2,00	...	–68	–4,68	...	–2,96	...	...	–2,96
May	...	...	+1,50	...	+1,50	...	..	...	...	–31	–31	...	–6,03	...	...	–6,03
June	...	...	–9,00	...	–9,00	...	...	...	...	...	...	...	–5,92	...	...	–5,92
July	...	...	...	...	...	–8,00	...	...	...	–11	–8,11	...	...	...	...	...
August ...	...	...	...	...	...	...	–4,01	...	...	–55	–4,56	–11	–5,00	...	...	–5,11
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	. .	...	–2,85	...	...	–41	–3,26	...	–3,96	...	...	–3,96
November ...	...	...	...	+34	+34	–2,67	...	...	...	–88	–3,55	–1,00	–5,04	...	...	–6,04
December ...	+1,00	+95	+7,00	+1,00	+9,95	...	...	..	...	...	...	–1,45	...	...	–53	–1,98
January ...	...	...	...	+1,11	+1,11	...	..	...	+5	...	–5	–39	...	+1,00	–5,53	–4,92
February ...	+2,50	...	–50	...	2,00	...	...	...	...	...	...	–17	...	–1,00	–2,44	–3,61
March ...	...	...	–4,50	...	–4,50	–3,10	–4,89	...	...	...	–7,99	–19	...	...	–2,08	+1,89
TOTAL ...	+3·50	+95	–5,00	+2,45	+1,90	–15,77	–11,75	–2,00	+5	–2,94	–32,41	–3,31	–28,91	...	–6,42	–38,64

Monthly Expansions (+) and Contractions (−) of Currency 1928-29 to 1933-34.

(In Lakhs of Rupees)

Month	1931-32 Government of India Securities	1931-32 Advances to the Imperial Bank	1931-32 Government of India Rupee Securities	1931-32 Gold	1931-32 Total	1932-33 Advances to the Imperial Bank	1932-33 Government of India Rupee Securities	1932-33 Gold	1932-33 Total	1933-34 Sterling Securities	1933-34 Government of India Rupee Securities	1933-34 Gold	1933-34 Total
April	−3,00	...	...	+1,70	−1,30	−9,51	+10	+27	−9,15	...	−23	+27	+4
May	−6	...	...	−7,34	−7,40	...	−5,02	+5,18	+16	...	−23	+19	−4
June	−2,93	...	...	−3,07	−6,00	...	−6	+7	...	...	−2,61	+2,62	+1
July	−59	...	...	−58	−1,17	...	−8	+8	...	..	−5	+6	+1
August	−53	...	...	−4,19	−4,72	...	−25	+25	...	...	−17	+18	+1
September	−62	+2,50	...	−8,16	−6,28	...	−31	+23	−8	...	−20	+20	...
October	+14,39	−2,50	. .	+9	+11,98	...	−18	+19	+1	...	−20	+19	−1
November	+4,64	...	...	+19	+4,83	...	−23	+22	−1	...	−55	+54	−1
December	+19,57	+2,50	...	+8	+22,15	...	−6,92	+6,93	+1	...	−34	+27	−7
January	+1,21	+1,00	+2,50	+26	+4,97	...	−6,77	+6,84	+7	...	−6,83	+6,81	−2
February	−9	−50	+4,50	+9	−4,00	. .	−7	+16	+9	...	−25	+24	−1
March	−34	+75	−1,24	+34	−49	...	−15	+31	+16	+8,25	−12,11	+3,97	+11
TOTAL ...	+31,65	+3,75	+5,76	−20,65	+20,57	−9,51	−19,82	+20,73	−8,60	+8,25	−23,77	+15,54	+2

Composition of Paper Currency Reserve

(In Lakhs of Rs.)

Last day of Month	Gross Note Circulation	Gold			Silver			Securities		Internal Bills of Exchange	Percentage of Gold to Note Circulation
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities		
1914											
March	66,12	22,44	9,15	31,59	20,59	...	20,53	10,00	4,00	...	47·8
April	65,46	20,34	9,15	29,49	21,97	...	21,97	10,00	4,00	...	45·1
May	66,77	18,91	9,15	28,06	24,71	...	24,71	10,00	4,00	..	42·0
June	70,26	18,00	9,15	27,15	29,11	...	29,11	10,00	4,00	...	38·6
July	75,45	18,36	9,15	27,31	33,94	...	33,94	10,00	4,00	...	36·5
August	65,79	6,16	7,65	13,81	37,98	...	37,98	10,00	4,00	...	21·0
September ...	60,52	3,92	7,65	11,57	34,95	...	34,95	10,00	4,00	...	19·1
October	60,78	6,34	7,65	13,99	32,79	...	32,79	10,00	4,00	...	23·0
November ...	61,19	8,86	7,65	16,51	30,68	...	30,68	10,00	4,00	...	27·0
December	60,83	9,31	7,65	16,96	29,87	...	29,87	10,00	4,00	...	27·9
1915											
January	60,26	8-31	7,65	15,96	30,30	...	30,30	10,00	4,00	...	26·5
February	59,55	6,71	7,65	14,36	31,19	...	31,19	10,00	4,00	...	24·1
March	61,63	7,64	7,65	15,29	32,34	...	32,34	10,00	4,00	...	24·8
April	60,24	7,69	7,65	15,34	30,90	...	30,90	10,00	4,00	...	25·5
May	61,99	7,75	7,66	15,40	32,59	..	32,59	10,00	4,00	...	24·8
June	66,48	7,77	7,65	15,42	37,06	...	37,06	10,00	4,00	...	23·2
July	68,06	7,82	6,15	13,97	40,09	...	40,09	10,00	4,00	...	20·5
August	66,41	6,34	6,15	12,49	39,92	...	39,92	10,00	4,00	...	18·8
September ...	63,81	5,91	6,15	12,06	37,75	...	37,75	10,00	4,00	...	18·9
October	63,59	7,05	6,15	13,20	36,39	...	36,39	10,00	4,00	...	20·8
November ...	62,06	8,31	6,15	14,46	33,60	...	33,60	10,00	4,00	...	23·3
December	62,34	12,75	6,15	18,90	29,44	...	29,44	10,00	4,00	...	30·3

Composition of Paper Currency Reserve—(*Contd.*)

(*In Lakhs of Rs.*)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1916											
January ...	62,42	12,74	8,18	20,92	26,02	...	26,02	10,00	5,48	...	33·5
February ...	64,01	12,58	8,98	21,51	24,00	...	24,00	10,00	8,50	...	33·6
March	67,73	12,24	11,92	24,16	23,06	51	23,57	10,00	10,00	...	35·8
April	65,47	12,25	11,92	24,17	18,55	1,47	20,02	10,00	11,28	...	36·9
May	66,31	12,12	11,92	24,04	17,68	1,53	19,21	10,00	13,06	...	36·3
June	71,39	12,51	11,92	24.43	22,43	1,47	23,90	10,00	13,06	...	34·2
July	75,48	12.29	11,92	24.21	26,83	1,38	28,21	10,00	13,06	...	32·1
August ...	74,01	11,66	11,92	23,58	26,81	56	27,37	10,00	13.06	...	31·9
September ...	71,55	10,99	11,92	22,91	24,24	1,34	25,58	10,00	13,06	...	32·0
October ...	73,32	12,56	11,92	24,48	23,97	1,67	25,64	10,00	13,06	...	33·4
November ...	76,50	12,38	11,92	24,30	18,07	1,89	19,96	10,00	22,24	...	31·8
December ...	82,17	11,92	11,92	23,84	14,39	2,98	17,37	10,00	30,96	. .	29·0
1917											
January ...	84,36	12,57	10,42	22,99	15,04	2,44	17,48	10,00	33,88	...	27·3
February ...	86,76	12,17	8,92	21,09	15,82	2,52	18,34	10.00	37,32	...	24·3
March... ...	86,37	12,00	6,67	18,67	17,08	2,13	19,21	10.00	38,49	...	21·6
April	82,72	11,39	5,17	16,56	13,67	1,70	15,37	10.00	40,78	...	20·0
May	88,31	9,94	5,17	15,11	14,68	85	15,53	10.00	47.67	...	17·1
June	93,29	7,07	4,80	11,87	19,61	63	20,24	10.00	51,17	...	12·7
July	99,31	7,03	4,42	11,45	25,90	48	26,38	10.00	51.48	...	11·5
August ...	1,05,15	12,12	2,55	14,67	28,55	45	29,00	10,00	51,48	...	14·0
September ...	1,08,43	15,86	1,52	17,38	28,88	69	29,57	10,00	51,48	...	16·0
October ...	1,14,77	21,91	1,92	23,83	28,88	58	29.46	10,00	51,48	...	20·8
November ...	1,12,93	24,65	2,30	26,95	24,01	49	24,50	10,00	51,48	...	23·9
December ...	1,08,31	26,73	1,04	27,77	18,27	79	19,06	10,00	51,48	.	24·7

Composition of Paper Currency Reserve—(*Contd*).

(In Lakhs of Rs.)

Last day of Month	Gross Note Circulation	Gold			Silver			Securities		Internal Bills of Exchange	Percentage of Gold to Note Circulation
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities		
1918											
January ...	1,04,82	27,19	1,04	28,23	14,92	19	15,11	10,00	51,48	...	26·9
February ...	1,03,46	28,30	67	28,97	12,56	45	18,01	10,00	51,48	...	28·0
March	99,79	26,85	67	27,52	10,40	39	10,79	10,00	51,48	...	27·6
April	1,05,96	22,54	45	23,09	7,26	6,46	13,72	10,00	59,19	...	21·8
May	1,11,53	19,12	45	19,57	5,14	10,42	15,56	10,00	64,16	...	17·5
June	1,14,79	21,04	45	21,49	5,66	9,29	14,95	10,00	68,40	...	18·7
July	1,21,41	20,21	12	20,33	8,02	10,40	18,42	10,00	72,65	...	16·7
August ...	1,31,41	20,33	12	20,45	11,18	13,78	24,96	10,00	76,00	...	15·5
September ...	1,34,38	20,38	12	20,50	12,38	15,50	27,88	10,00	76,00	...	15·3
October ...	1,36,43	20,41	12	20,53	10,49	19,42	29,91	10,00	75,99	...	15·0
November ...	1,40,76	20,45	12	20,57	8,48	25,71	34,19	10,00	76,00	...	14·6
December ...	1,47,09	19,68	12	19,80	10,56	21,57	32,13	12,66	82,50	...	13·5
1919											
January ...	1,49,74	18,91	12	19,03	11,58	20,54	32,12	16,08	82,50	...	13·4
February ...	1,51,48	18,14	12	18,26	13,50	21,15	34,65	16,08	82,50	...	12·1
March ...	1,53,46	17,37	12	17,49	16,66	20,73	37,39	16,08	82,50	...	11·4
April	1,53,72	14,55	3,00	17,55	13,01	19,58	37,59	16,08	82,50	...	11·4
May	1,55,18	16,11	1,50	17,61	19.61	19,38	38,99	16,08	82,50	...	11·4
June	1,62,76	17,69	...	17,69	23,55	22,94	46,49	16,08	82,50	...	10·9
July	1,67,11	19,13	...	19,13	28,49	20,91	49,40	16,08	82,50	...	11·4
August... ...	1,68,92	19,26	9	19,35	31,48	19,51	50,99	16,08	82,05	...	11·4
September ...	1,71,86	18,45	2,92	21,37	34,35	16,62	50,97	17,03	825,0	...	12·4
October...	1,75,29	19,25	5,59	24,84	35,59	15,33	50,92	17,03	82,50	...	14·2
November ...	1,79,67	23,54	9,16	32,70	32,84	14,60	37,44	17,03	82,50	...	18·2
December ...	1,82,91	29,61	10,10	39,71	29,64	14,03	44,67	17,03	82,50	..	21·7

Composition of Paper Currency Reserve—(*Contd.*)

(In Lakhs of Rs.)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1920											
January ...	1,85,15	35,10	11,62	46,72	28,38	11,95	40,33	15,60	82,50	...	25·2
February ...	1,83,03	41,30	4,65	45,95	29,85	9,14	38,99	15,60	82,50	...	25·1
March ...	1,74,52	44,36	3,45	47,81	33,22	6,63	39,85	19,59	67,27	.	27·4
April ...	1,70,74	45,38	95	46,33	33,81	5,56	39,37	23,77	61,27	...	27·1
May ...	1,66,92	42,86	74	43,60	37,10	4,27	41,37	31,18	50,77	...	26·1
June ...	1,64,34	43,48	2,49	45,97	41,94	3,61	45,55	35,55	37,27	...	28·0
July ...	1,63,87	44,62	...	44,62	46,75	3.61	50.36	40.62	28,27	...	27·2
August ...	1,63,27	39,12	...	39,12	51,62	3,67	55.29	47,33	21,53	...	24·0
September ...	1,57,63	36,15	...	36,15	54,34	3,72	58,06	47,14	16,28	...	22·9
October ...	1,59,58	23,75	...	23,75	55,60	3,81	59,41	68,07	8,35	...	14·9
November ...	1,60,21	23,86	...	23,86	56,05	3,88	59,93	68,07	8,35	...	14.9
December ...	1,61,40	23,89	..	23,89	57,13	3,96	61,09	68,07	8,35	...	14.8
1921											
January ...	1,63,41	24,00	...	24,00	58,95	4.04	62,99	68.07	8.35	...	14·7
February ...	1,64,60	24,06	...	24,06	60,03	4,09	64,12	68.07	8.35	...	14·6
March ...	1,66,16	24,17	...	24,17	61,42	4,14	65,56	68,07	8.35	...	14·5
Apr l ...	1,67,32	24,26	...	24.26	62.45	4,20	66,65	68,06	8,35	...	14·5
May ...	1,67,81	24,30	...	24,30	62,97	4.20	67,17	67,99	8.35	...	14.5
June ...	1,71,76	24,35	...	24.35	66,87	4,20	71.07	67,99	8.35	...	14·2
July ...	1,75,56	24,35	...	24.35	70,60	4,21	74.81	68,05	8.35	...	13·9
August ...	1,76,02	24,35	...	24,35	72,19	4,21	76,40	66,92	8.35	...	13·8
September ...	1,78,37	24,34	...	24.34	74,55	4.21	78,76	66,92	8,35	...	13·6
October ...	1,79,72	24,34	...	24,34	75,76	4,21	79,97	67,06	8.35	...	13·5
November ...	1,73,48	24,33	...	24.33	74,20	4,21	78,41	64.40	6,34	...	14·0
December ...	1,72,53	24.32	...	24,32	69,76	4,21	73,97	68,40	5,85	...	14·1

Composition of Paper Currency Reserve.—(*Contd.*)

(In Lakhs of Rupees)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Interna Bills of Exchange	Percentage of Gold to Note Circulation
1922											
January ...	1,74,40	24,32	...	24,32	70,28	4,55	74,83	69,39	5,85	...	13·9
February ...	1,73,87	24.32	...	24,32	71,72	4,35	76,27	67,43	5,85	...	14·0
March ...	1,74,76	24.32	...	24,32	72,96	4,56	77,52	65,08	5,85	2,00	13·9
April ...	1,71,76	24,32	...	24,32	71,95	4,56	76,51	65,09	5.85	...	14·2
May ...	1,72,39	24,32	...	24,32	72.50	4,56	77,06	65.17	5,85	...	14·1
June ...	1,76,01	24,32	...	24,32	76,17	4,56	80,73	65,12	5.85	...	13·8
July ...	1,80,41	24,32	...	24,32	80,53	4,56	85,09	65,15	5,85	...	13·5
August ...	1,82,26	24.32	...	24,32	83,76	4.56	88,32	63,78	5,85	...	13·3
September ...	1,80,76	24.32	...	24.32	85,11	4.56	89,67	60,92	5,85	...	13·5
October ...	1,79,63	24,32	...	24,32	86,54	4,56	91,10	58,37	5.85	...	13·5
November ...	1,77,30	24.32	...	24,32	85.16	4.56	89,72	57,42	5,85	...	13·7
December ...	1,74.18	24,32	...	24,32	82.03	5,56	86,59	57,42	5,85	...	14·0
1923											
January ...	1,72.65	24.32	...	24,32	80.49	4,56	85,05	57,43	5.85	...	14·1
February ...	1,73,89	24.32	...	24,32	81.73	4.56	86,29	57,43	5,85	...	14·0
March ...	1,74,70	24.32	...	24.32	82.50	4,56	87,06	57,48	5,85	...	13·9
April ...	1,73,37	24.32	...	24,32	79,09	4,56	83,65	57,55	5,85	2,00	14·0
May ...	1,71,23	24.32	...	24.32	79.01	4,56	83,57	57,50	5,85	...	14·2
June ...	1,73,61	24.32	...	24,32	81,39	4.56	85,95	57,50	5,85	...	14·0
July ...	1,75,72	24,32	...	24.32	85,48	4.56	90.04	57,51	5,85	...	13·8
August ...	1,76,30	24,32	...	24,32	89.91	4,56	94,47	57,51	...	...	13·8
September ...	1,79,29	24,32	...	24,32	92,66	4,83	97,49	57,48	...	...	13·6
October ...	1,80,82	24,32	...	24,32	93.48	5,54	99,02	57,48	...	...	13·4
November ...	1,78,30	22.32	...	22,32	89,88	5,62	95,50	57,48	3,00	...	12·5
December ...	1,83,41	22.32	...	22,32	80.97	5.64	86,61	57,48	9,00	8,00	12·2

Composition of Paper Currency Reserve.—(*Contd.*)

(*In Lakhs of Rupees*)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1924											
January ..	1,84,02	22,32	...	22,32	76,49	5,69	82,18	57,52	14,00	8,00	12·1
February ...	1,86,19	22,32	...	22,32	74,64	5,70	80,34	57,53	14,00	12,00	12·0
March	1,85,85	22,32	...	22,32	74,18	5,82	80,00	57,53	14,00	12,00	12·0
April	1,81,33	22,32	...	22,32	71,50	5,99	77,49	57,53	14,00	10,00	12·8
May	1,74,51	22,32	...	22,32	70,56	6,10	76,66	57,53	14,00	4,00	12·8
June	1,72,49	22,32	...	22,32	72,47	6,18	78,65	57,53	14,00	...	12·9
July	1,76,24	22,32	...	22,32	76,23	6,34	82,57	57,35	14,00	...	12·7
August ...	1,78,13	22,32	...	22,32	78,06	6,42	84,48	57,34	14,00	...	12·5
September ...	1,79,26	22,32	...	22,32	79,15	6,48	85,63	57,31	14,00	...	12·4
October ...	1,80,98	22,32	..	22,32	80,07	6,47	86,54	57,13	15,00	...	12·3
November ...	1,80,06	22,32	...	22,32	78,13	6,49	84,62	57,13	16,00	...	12·4
December ...	1,79,21	22,32	...	22,32	74,21	6,56	80,77	57,13	17,00	2,00	12·4
1925											
January... ...	1,81,12	22,32	...	22,32	71,11	6,56	77,67	57,13	20,00	4,00	12·3
February ..	1,83,72	22,32	...	22,32	69,51	6,77	76,28	57,13	20,00	8,00	12·2
March	1,84,19	22,32	...	22,32	70,02	6,73	76,75	57,13	20,00	8,00	12·1
April	1,79,61	22,32	...	22,32	67,40	6,77	74,17	57,13	20,00	6,00	12·4
May	1,73,23	22,32	...	22,32	66,95	6,80	73,75	57,16	20,00	...	12·9
June	1,78,25	22,32	...	22,32	71,86	6,89	78,75	57,18	20,00	...	12·5
July	1,84,30	22,32	...	22,32	77,85	6,95	84,80	57,18	20,00	...	12·1
August ...	1,88,21	22,32	...	22,32	81,79	6,99	88,78	57,12	20,00	...	11·9
September ...	1,89,51	22,32	...	22,32	83,04	7,05	90,09	57,11	20,00	...	11·8
October ...	1,91,77	22,32	...	22,32	83,21	7,13	90,34	57,11	22,00	...	11·6
November ...	1,89,68	22,32	...	22,32	80,02	7,23	87,25	57,11	23,00	..	11·8
December ...	1,91,76	22,32	...	22,32	76,06	7,27	83,33	57,11	29,00	...	11·6

Composition of Paper Currency Reserve.—(*Contd.*)

(In Lakhs of Rupees)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1926											
January ...	1,91,18	22,32	...	22,32	73,38	7,37	82,75	57,11	29,00	...	11·67
February ...	1,91,76	22,32	...	22,32	73,91	7,42	83,33	57,11	29,00	...	11·63
March ...	1,93,34	22,32	...	22,32	77,25	7,66	84,91	57,11	29,00	...	11·54
April ...	1,85,13	22,32	...	22,32	77,04	7,66	84,70	57,11	21,00	...	12·05
May ...	1,87,08	22,32	...	22,32	78,85	7,75	86,60	57,16	21,00	...	12·00
June ...	1,91,44	22,32	...	22,32	83,05	7,87	90,92	57,20	21,00	...	11·65
July ...	1,97,48	22,32	...	22,32	88,91	7,94	96,85	57,31	21,00	...	11·30
August ...	2,00,53	22,32	...	22,32	91,96	7,87	99,83	57,38	21,00	...	11·13
September ...	1,96,45	22,32	...	22,32	94,86	7,87	1,02,73	57,40	14,00	...	11·36
October ...	1,93,79	22,32	...	22,32	96,83	8,04	1,04,87	52,60	14,00	...	11·50
November ...	1,89,15	22,32	...	22,32	97,52	8,04	1,05,56	51,27	10,00	...	11·80
December ...	1,81,18	22,32	...	22,32	95,32	8,20	1,03,52	49,77	5,57	...	12·30
1927											
January ...	1,80,47	22,32	...	22,32	94,47	8,34	1,02,81	49,77	5,57	...	12.37
February ...	1,82,74	22,32	...	22,32	94,64	8,44	1,03,08	49,77	5,57	2,00	12.35
March ...	1,84,13	22,32	...	22,32	95,94	8,53	1,04.47	49,77	5,57	2,00	12.25
April ...	1,73,71	29,76	...	29,76	95.53	8,86	1,03,39	37,46	2,10	...	17·13
May ...	1,71,44	29,76	...	29,76	95,20	8,92	1,04,12	35,46	2,10	...	17·36
June ...	1,72,57	29,76	...	29,76	98,36	8,99	1,07,35	35,46	...	...	17·24
July ...	1,77,68	29,76	...	29,76	1,03,36	9,06	1,12,42	35,45	...	...	16·75
August ...	1,80,48	29,76	...	29,76	1,06,00	8,90	1,14,90	35,63	19	...	16·49
September ..	1,81,82	29,76	...	29,76	1,07,34	7,35	1,14,69	36,35	1,02	...	16·37
October ...	1,88,38	29,76	...	29,76	1,08,27	7,31	1,15,58	36,75	1,29	...	16·25
November ...	1,81,55	29,76	...	29,76	1,06,33	7,17	1,13,50	36,89	1,40	...	16·40
December . .	1,82,64	29,76	...	29,76	1,01,11	7,42	1,08,53	36,92	3,43	4,00	16·66

Composition of Paper Currency Reserve.—(*Contd.*)

(In Lakhs of Rupees)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1928											
January	1,86,02	29,76	......	29,76	98.46	7,47	1,05,98	37,89	4,44	8,00	16·70
February	1,85,78	29,76	......	29,76	98,79	7.57	1,06,36	37,89	3,77	8,00	16·72
March	1,84,87	29,76	......	29,76	98,72	7.66	1,06,38	37,96	3,77	7,00	16·73
April	1,82,78	29,76	......	29,76	96.11	6,66	1,02,77	38,98	3,77	7,50	17·00
May	1,83,01	29,76	......	29,76	94.58	6.30	1,00,88	39,60	3,77	9,00	17·10
June	1,77,16	29,76	......	29,76	97,45	3.59	1,01,04	41,84	4,52	......	16·80
July	1,80,79	29,76	.. ...	29.76	1,00,79	2.34	1,03,13	42,73	5,17	......	16.46
August	1,82,90	29.76	......	29,76	1,02,51	2,71	1,05,22	42,60	5,32	......	16·27
September ...	1,84,60	29,76	......	29,76	1,04,02	2,87	1,06,89	42,34	5,61	......	16·72
October	1,84,66	29,76	......	29,76	1,03,81	3,02	1,06,83	42,33	5,74	......	16·11
November ...	1,83,15	30,09	......	30,09	1,01,13	3.76	1,04,89	42,33	5,84	......	16·43
December	1,89,00	31,10	......	31,10	96,16	4,62	1,00,78	43,27	6,85	7,00	17·09
1929											
January	1,89,74	32,21	......	32,21	94.67	4.88	99,55	43,27	7,71	7,00	17·62
February	1,92,47	32,21	......	32,21	94,85	5,11	99.96	43,27	10,53	6,50	17·32
March	1,88,03	32,22	......	32,22	94,94	4,95	99,89	43,23	10,69	2,00	17·32
April	1,83,66	32.22	......	32,22	94.90	4,48	99,38	43,23	8,83	......	17·32
May	1,84.16	32,22	......	32,22	95,40	4,17	99,57	43,23	9,14	......	17·50
June	1,87,71	32,22	......	32,22	97,77	4,88	1,02,65	43,22	9,62	......	17·11
July	1,85,72	32,22	......	32,22	1,03,82	4,62	1,08,44	43,19	1,87	......	17·35
August	1,85,20	32,22	......	32,22	1,07,23	4.58	1,11,81	39,13	2,04	.. ...	17·40
September ...	1,86,80	32,22	......	32,22	1,08,05	4,95	1,13,00	39,17	2,41	......	17·25
October	1,84,83	32,22	......	32,22	1,08,93	4,65	1,13,58	36,32	2,71	......	16·99
November ...	1,80,77	32,22	......	32,22	1,07,19	3,97	1,11,16	36,32	1,07	... .	17.82
December	1,79,41	32,22	......	32,22	1,03,77	4,28	1,08,05	37,33	1,81	......	17·98

Composition of Paper Currency Reserve.—(*Contd.*)

(In Lakhs of Rupees)

Last day of Month	Gross Note Circulation	Gold			Silver			Securities		Internal Bills of Exchange	Percentage of Gold to Note Circulation
		In India	Out of Indin	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities		
1930											
January	1,80,21	32,27	......	32,27	1,04,29	2,83	1,06,62	38,85	2,47	......	17·91
February	1,81,60	32,27	......	32,27	1,05,69	1,82	1,07,51	38,88	2,94	......	17·77
March	1,77,23	32,27	......	32,27	1,08,11	2.85	1,10,96	33,85	15	......	18·20
April	1,73.90	32,27	......	32,27	1,07.22	3,38	1,10,60	30,73	30	......	18·55
May	1,67,78	32,28	......	32,28	1,07,04	3,48	1,10,52	24,36	62	......	19·24
June	1,63,73	32,28	......	32,28	1,08,91	3,48	1,12,39	18,33	73	......	19·10
July	1,68,26	32,28	......	32,28	1,13,37	3.49	1,16,86	18,39	73	......	19·18
August	1,68,87	32,28	......	32,28	1,15,43	5.25	1,20,68	14,68	1,23	......	19·11
September... ...	1,71,47	32,28	......	32.28	1,15,92	5,83	1,21,75	15,59	1,85	......	18·82
October	1,70,14	32.28	......	32,28	1,17,47	5.63	1,23,10	12,73	2,03	......	18·97
November ...	1,64,84	32,28	......	32,28	1,16,90	5,76	1,22,66	8,67	1,23	......	19·58
December	1,61,34	31,74	......	31,74	1,14,60	5,39	1,19,99	9,61	......	......	19·67
1931											
January	1,58,20	26,21	......	26.21	1,15,32	5,80	1,21,12	9,87	......	1,00	16·67
February	1,56,53	23,77	......	23,77	1,16,09	6,58	1,22,67	10,09	......	......	15·18
March	1,60,84	25,85	......	25,85	1,17,86	6,94	1,24,80	10,19	......	......	16·00
April	1,60,14	27,54	......	27,54	1.18,20	7,20	1,25,40	7,20	......	......	17·20
May	1,54,79	20,21	......	20,21	1,19,61	7,83	1,27,44	7,14	......	......	18·05
June	1,52,54	17,14	......	17,14	1,22,44	7,59	1,30.03	5.37	......	....	11·28
July	1,55,65	16,56	......	16,56	1,25,66	6,90	1,32,56	6,53	......	......	10·64
August	1,53,58	12,37	......	12,37	1,26,94	5,11	1,32,05	9,16	......	......	14·63
September ...	1,48,74	4,21	......	4,21	1,26,81	5,73	1,32,54	9,49	......	2,50	2·88
October	1,59,75	4,30	......	4,30	1,24,65	6,92	1,31,57	23,88	......	......	2·77
November ..	1,62,85	4,48	......	4,48	1,21,61	7,44	1,29.05	28,52	......	......	2·76
December	1,79,30	4,57	......	4.57	1,15,04	7,94	1.22,98	49,25	......	2,50	2·58

Composition of the Paper Currency Reserve.—(*Contd.*)

(In Lakhs of Rupees)

Last day of Month	Gross Note Circulation	Gold: In India	Gold: Out of India	Gold: Total	Silver: Coin	Silver: Bullion	Silver: Total	Securities: Rupee Securities	Securities: Sterling Securities	Internal Bills of Exchange	Percentage of Gold to Note Circulation
1932											
January	1,79,16	4,83	...	4,83	1,08,88	6.95	1,15,83	55,00	...	3,50	2·74
February	1,79,54	4,92	...	4,92	1,04,11	8.09	1,12,20	59,42	...	3,00	2·78
March	1,78,14	5.26	...	5.26	1,01,96	9.22	1,11,18	57,94	...	3,75	3·01
April	1 68,31	5.53	...	553	1,00,81	9.69	1,10,50	52.28	...	...	3·27
May	1,68,47	10.71	...	10,71	99.83	10,67	1,10,50	47.26	...	...	6·35
June	1,70,85	10.78	...	10,78	1,01,30	10,58	1,11,88	48,19	...	...	6·32
July	1,74,23	10,86	...	10,86	1,03,64	10,75	1,14,39	48,98	...	...	6·26
August	1,75,58	11,11	...	11,11	1,04.04	10,98	1,15,02	49,45	...	...	6·32
September	1,75,77	11,34	...	11.34	1,03.01	12.28	1,15,29	49.14	...	...	6·43
October	1,75,85	11,53	...	11.53	1,02,06	12,86	1,14,92	49.40	...	...	6·54
November	1,75,63	11,75	...	11,75	1,00,49	12,48	1,12,97	50,91	...	...	6·72
December	1,74,80	18,68	...	18,68	97,83	12,83	1,10,66	45,46	...	...	10·70
1933											
January	1,74,33	25.52	...	25,52	96,26	13.28	1,09.54	39 27	...	..	14·64
February	1,75,25	25.68	...	25.68	96.03	14,34	1,10.37	39.20	...	...	14·65
March	1,76,90	25.99	...	25.99	96.34	15,52	1,11,86	39.05	...	...	14·70
April	1,76,66	26.26	...	26,26	95,70	15,88	1,11,58	38.82	...	...	14·80
May	1,75,69	26.45	...	26.45	94,27	14.94	1,09.21	40.03	...	...	15·05
June	1,76.57	29.07	...	29,07	93,92	9.52	1,03.44	44,06	...	...	16·45
July	1,78,88	29,13	...	29,13	95,28	9,84	1,05,12	44.63	...	...	16·30
August	1,79.76	29,31	...	29,31	95.45	9,96	1,05,41	45,04	...	...	16·30
September	1,79,70	29,51	...	29.51	94,61	10.16	1,04,77	45,42	..	...	16·40
October	1,80,04	29.70	..	29.70	94,33	9.91	1,04,24	46.10	...	...	16·50
November	1,79,64	30.24	...	30.24	92.97	10,30	1,03.27	46.13	...	...	16·80
December	1,78,11	30.51	...	30.51	90,74	10,19	1,01,23	46.37	...	...	17·10
1934											
January	1,77,99	37.32	...	37.32	89,61	10.70	1,00.31	40.36	..	...	21·00
February	1,77,29	37.56	...	37.56	87,81	11,13	98,94	40,79	..	...	21·20
March	1,77,22	41,53	...	41,53	86,49	11,50	97,99	29.45	8 25	...	23·40

Imperial Bank Statistics in the last week of each of the months of 1933-34

(In Lakhs of Rupees)

	April	May	June	July	August	September	October	November	December	January	February	March
Liabilities—												
Public Deposits	12,50	6,59	5,84	8,91	8,70	7,09	7,22	6,99	7,08	6,98	8,12	8,18
Other Deposits	72,73	74,81	73,59	73,99	78,27	76,24	78,28	75,58	73,83	78,33	72,65	74,12
Loans from Government of India under Section 20 of the Paper Currency Act against inland bills ...	...	...	...	...	...	..	...	..	...	...	...	...
Assets—												
Government Securitis ...	39,24	37,70	38,49	40,24	45,57	46,13	44,30	42,86	46,87	48,34	48,44	58,79
Ways and Means advances to the Government of India ...	...	4,00	1.00	...	...	50	6,50	5,00	1,50	1,00	6,50	...
Loans	5,39	3,65	3,63	3,33	2,94	2,40	1,88	1,87	4,06	3,13	2,65	4,49
Cash Credits	19,40	19,18	18,62	16.88	15,56	15,15	14,44	13,93	15.09	15,87	16,69	17,35
Inland bills discounted and purchased	3,74	3,22	2.08	2,09	1,77	1,62	2,15	2,45	2,29	2,59	2,73	2,61
Foreign bills discounted and purchased	30	22	17	31	23	27	28	20	30	30	27	49
Cash	24,71	21,00	23,08	27,76	28,78	25,26	24,15	24,37	18,62	17,02	11,89	12,07
Percentage of Cash to liabilities	28,53	25,34	28,19	33,09	32,71	29,94	27,86	29,01	22,50	20,91	14,52	14,45
Bank rate	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$

Rates of scoun Central Banks of certain countries 1932-33 and 1933-34

(Rates per cent)

1931-32

End	United States: F. R. B. rate for 60—90 days Paper	United States: F. R. B. average rate	Germany	France	British India	Japan	Switzerland	Italy	Russia U. S. S. R.	United Kingdom
Apri.	2	3·08	5	2	7	5·11	2	5½	8	3
May	1½	2·81	5	2	6	5.11	2	5½	8	2·5
June	1½	2·81	7	2	6	5·11	2	5½	8	2
July	1½	2·81	10	2	6	5·11	2	5½	8	2
August	1½	2·81	(d)10	2	7	5·11	2	5½	8	2
Septemb	1½	2·81	8	2	8	5·11	2	7	8	2
October	) 3½	3·54	8	2½	8	5·84	2	7	8	2
Novemb	3¾	3·58	8	2½	8	6·57	2	7	8	2
Decembe	3½	3·58	7	2½	8	6·57	2	7	8	2
January	3½	3·52	7	2½	7	6·57	2	7	8	2
Feb:	3	3·54	7	2½	6	6·57	2	7	8	2
	3	3·45	6	2¼	6	5·84	2	6	8	2

1932-33

End	United States: F. R. B. rate for 60—90 days Paper	United States: F. R. B. average rate	Germany	France	British India	Japan	Switzerland	Italy	Russia U. S. S. R.	United Kingdom
Apri.	3	3·43	5	2·5	5	5·84	2	6	8	2
May	3	3·44	5	2·5	5	5·84	2	5	8	2
June	2·5	3·45	5	2·5	5	5·11	2	5	8	2
July	2·5	3·36	5	2·5	4	5·11	2	5	8	2
August	2·5	3·36	5	2·5	4	4·38	2	5	8	2
Septemb	2·5	3·35	4	2·5	4	4·38	2	5	8	2
October	2·5	3·36	4	2·5	4	4·38	2	5	8	2
Novemb	2·5	3·36	4	2·5	4	4·38	2	5	8	2
Decembe	2·5	3·36	4	2·5	4	4·38	2	5	8	2
January	2·5	3·33	4	2·5	4	4·38	2	4	8	2
Feb:	3·5	3·33	4	2·5	3·5	4·38	2	4	8	2
	3	3·49	4	2·5	3·5	4·38	2	4	8	2

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End	United States: F. R. B. rate for 60—90 days Paper	United States: F. R. B. average rate	Germany	France	British India	Japan	Switzerland	Italy
Apri.	3	3·47	4	2·5	3½	4·38	2	4
May	2·5	3·44	4	2·5	3½	4·38	2	4
June	2·5	3·20	4	2·5	3½	4·38	2	4
July	2·5	3·17	4	2·5	3½	3·65	2	4
August	2·5	3·17	4	2·5	3½	3·65	2	4
Septemb	2·5	3·17	4	2·5	3½	3·65	2	3·5
October	2	3·12	4	2·5	3½	3·65	2	3·5
Novemb	2	2·94	4	2·5	3½	3·65	2	3·5
Decembe	2	2·92	4	2·5	3½	3·65	2	3
January	2	2·92	4	2·5	3½	3·65	2	3
Feb:	1·5	2·64	4	3	3½	3·65	2	3
	1·5	2·52	4	3	3½	3·65	2	3

(a) 2½% from 8th to 14th October
(b) 8 % from 4th to 6th May

Gold and foreign assets reserves of certain principal countries during 1933-34

(Figures in millions of units)

End of		United States: Federal Reserve Banks and Government: Gold against certificates	United States: Federal Reserve Banks and Government: Other Gold Reserves	Total gold stock	United Kingdom: Bank of England: Gold	Germany: Reichs Bank: Gold	Germany: Reichs Bank: Foreign Assets	France: Gold	France: Foreign Assets: Funds available at sight	France: Foreign Assets: Negotiable securities	Canada: Government: Gold	Canada: Chartered Banks: Gold	Canada: Chartered Banks: Foreign Assets	Switzerland: Gold	Switzerland: Foreign Assets	British India (Government): Gold: At Home	British India (Government): Gold: Abroad	British India (Government): Foreign Assets
		Dollars			£'s	Reichsmark		Francs			Dollars			Francs		Rupees		
April	1933	323	3,654	3,977	186·9	411	99	80,866	2,440	1,406	72	62	1	2,383	2	415	29	445
May	,,	280	3,711	3,991	187·4	372	77	80,951	2,468	1,419	72	61	3	2,056	1	415	29	464
June	,,	265	3,732	3,997	190·6	189	85	81,243	2,585	1,405	72	56	−5	1,873	3	415	29	523
July	,,	252	3,748	4,000	191·4	245	78	81,976	2.572	1,403	72	55	16	1,820	4	415	29	508
August	,,	242	3,767	4,009	191·7	307	74	82,227	1,291	1,361	72	54	21	1,820	6	415	29	562
Sept.	,,	232	3,779	4,011	191·8	367	40	82,095	1,287	1,346	72	54	45	1,846	16	415	29	610
October	,,	225	3,786	4,011	191·8	396	18	81,032	1,285	1,302	72	55	31	1,981	28	415	29	580
Nov.	...	219	3,793	4,012	191·8	405	3	77,822	38	1,213	72	61	−6	1,998	14	415	29	575
Dec.	,,	213	3,799	4,012	191·7	386	9	77,098	16	1,143	72	55	−31	1,998	17	415	29	562
Jan.	1934	177	3,859	4,036	191·8	376	7	77,055	16	1,114	72	56	−25	1,998	19	415	29	615
Feb.	,,	(a) 38	(a) 4,295	(a) 4,393	192·0	334	7	73,971	15	1,056	72	57	−15	1,837	2	415	29	721
March	,,	(a) 95	(a) 4,449	(a) 4,544	192·2	237	8	74,613	12	1,056	72	54	−8	1,746	...	415	29	795

(a) According to old parity ($ 1=1·50,463 gramme of fine gold)

Market Rates of Discount of certain Principal Countries 1931-32 to 1933-34

(Monthly average is the average of daily quotations)

		United Kingdom (London) Bankers' Drafts, 90 days			France (Paris), Market Discount, Commercial Paper, 45—90 days			Germany (Berlin) Private Discount, 56—90 days' bills			Japan (Tokyo), Commercial Paper, 60 days	
		Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.
April	1931 ...	2·63	2·56	2·58	1·50	1·44	1·45	4·75	4·63	4·65	5·11	4·38
May	,, ...	2·56	2	2·25	1·41	1·06	1·25	4·75	4·63	4·65	5·11	4·38
June	,, ...	2·17	2·01	2·09	1·09	1·06	1·06	7	4·75	6·09	5·11	4·38
July	,, ...	4·34	1·31	2·59	1·63	1·07	1·31	7	7	7	4·75	4·02
August	,, ...	4·34	4·06	4·28	1·63	1·25	1·44				4·75	4·02
September	,, ...	5·81	4·16	4·75	1·50	1·38	1·44	8·25	7·09	7·94	4·75	4·02
October	,, ...	5·75	5·44	5·69	2	1·50	1·88	8	8	8	4·93	4·75
November	,, ...	5·88	5·63	5·75	1·88	1·88	1·88	8	8	8	5·84	4·75
December	,, ...	5·91	5·63	5·88	1·88	1·88	1·88	8	7	7·32	6·21	5·11
January	1932 ...	5·81	4·75	5·56	1·88	1·75	1·87	6·94	6·94	6·94	6·21	5·11
February	,, ...	5·19	3·50	4·66	1·88	1·81	1·81	6·81	6·56	6·67	5·84	5·11
March	,, ...	3·50	2·12	2·60	1·88	1·88	1·73	6·56	5·75	6·09	5·84	5·11
April	,, ...	2·44	1·91	2·19	1·88	1·33	1·37	5·63	4·88	5·13	5·84	5·11
May	,, ...	2·03	1·06	1·44	1·38	1·13	1·12	4·88	4·75	4·87	5·84	5·11
June	,, ...	1·09	1	1·06	1·13	1·06	1·12	4·75	4·75	4·75	5·84	5·11
July	,, ...	1·09	·72	·91	1	·88	1	4·75	4·50	4·58	5·48	5·11
August	,, ...	·88	·69	·75	1	·94	1·06	4·50	4·50	4·50	5·48	4·93
September	,, ...	·75	·59	·66	1	·88	1·06	4·50	3·88	4·25	5·48	4·93
October	,, ...	·91	·75	·85	1	1	1·06	3·88	3·88	3·88	5·11	4·75
November	,, ...	1·22	·72	·89	1·13	1	1·13	3·88	3·88	3·88	5·11	4·56
December	,, ...	1·28	·84	1·09	1·13	1	1·06	3·88	3·88	3·88	5·11	4·56
January	1933 ...	·97	·88	·88	1·50	1·08	1·34	3·88	3·88	3·88	4·93	4·38
February	,, ...	·91	·84	·84	2·19	1·75	2·04	3·88	3·88	3·88	4·95	4·38
March	,, ...	·75	·63	·63	2·38	1·88	2·13	3·88	3·88	3·88	4·75	4·38
April	,, ...	0·75	0·5	0·59	2·25	2	2·06	3·88	3·88	3·88	4·75	4·38
May	,, ...	0·56	0·44	0·5	2	2	1·92	3·88	3·88	3·88	4·75	4·38
June	,, ...	0·59	0·38	0·5	2	1·75	1·75	3·88	3·88	3·88	4·75	4·38
July	,, ...	0·53	0·41	0·47	1·75	1·5	1·69	3·88	3·88	3·88	4·38	4·38
August	,, ...	0·47	0·38	0·41	1·5	1·19	1·52	3·88	3·88	3·88	4·38	4·38
September	,, ...	0·56	0·38	0·44	1·5	1·13	1·38	3·88	3·88	3·88	4·38	4·38
October	,, ...	0·91	0·69	0·78	1·75	1·25	1·55	3·88	3·88	3·88	4·38	4·38
November	,, ...	1·09	0·94	1·05	2·5	1·75	2·16	3·88	3·88	3·88	4·38	4·38
December	,, ...	1·25	1·09	1·16	2·44	2·31	2·39	3·88	3·88	3·88	4·38	4·38
January	1934 ...	1·06	0·97	1·02	2·5	2·31	2·38	3·88	3·88	3·88	4·38	4·38
February	,, ...	1	0·88	0·95	2·88	2·38	2·66	3·88	3·88	3·88	4·38	4·38
March	,, ...	0·97	0·88	0·94	2·88	2·88	2·88	3·88	3·88	3·88	4·38	4·38

Market Rates of Discount of certain Principal Countries 1931-32 to 1933-34—(*Contd.*)

(Monthly average is the average of daily quotations.)

	Switzerland (Zurich), Market Discount 3 months' bill			United States (New York) Commercial Paper 4—6 months			United States (New York) Bankers' Acceptances 90 days.			India Bazar Bill Rate Calcutta	India Bazar Bill Rate Bombay
	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Beginning of month	Beginning of month
April 1931 ...	1·12	1	1·06	2·50	2·25	2·38	1·05	1·50	1·44	9-10	7 9/16
May ,, ...	1·12	1·12	1·13	2·25	2	2·20	1·13	0·88	1·02	8-9	6¾
June ,, ...	1·12	1·12	1·13	2	2	2	0·88	0·88	0·88	7-8	6
July ,, ...	2	1·12	1·55	2	2	2	0·88	0·88	0·88	7-8	3⅜
August ,, ...	2	1·88	1·98	2	2	2	0·88	0·88	0·88	7-8	3⅜
September ,, ...	1·88	1·75	1·80	2	2	2·02	1·25	0·88	0·98	7-8	3¾
October ,, ...	1·94	1·88	1·90	4·25	2	3·50	3·75	1·25	2 43	7-8	3¾
November ,, .	1·94	1·75	1·17	4·25	3·75	4·03	3·25	2·88	2·99	7-8	4⅛
December ,, ..	1·75	1·75	1·75	4	3·75	3·88	3	3·	3	7-8	5¼
January 1932 ...	1·75	1·56	1·68	4	3·75	3 88	3	2·75	2·86	7-8	6
February ,, ...	1·56	1·50	1·52	4	3·75	3 84	2·88	2·75	2·75	7-8	6
March ,, ...	1·50	1·50	1·50	3·75	3·50	3·83	2·63	2·38	2·50	7-8	6
April ,, ...	1·50	1·50	1·50	3·75	3·25	3·73	2·13	·88	1·45	7-8	6
May ,, ...	1·50	1·50	1·50	3·50	2·75	3 27	1·13	·88	·93	7-8	5¼
June ,, ...	1·50	1·50	1·50	3·0	2·50	2·94	·88	·88	·88	7-8	4½
July ,, ..	1·50	1·50	1·50	2·75	2·25	2·54	·75	·75	·75	7-8	3¾
August ,, ...	1·50	1·50	1·50	2·50	2	2·32	·75	·75	·75	6-7	3¾
September ,, ...	1·50	1·50	1·50	2·25	2	2·25	·75	·75	·75	6-7	3
October ,, ...	1·50	1·50	1·50	2·25	1·75	2·07	·50	·50	·59	6-7	3
November ,, ...	1·50	1·50	1·50	1·75	1·50	1·75	·50	·50	·50	6-7	3¾
December ,, ...	1·50	1·50	1·50	1·73	1·25	1·64	·38	·38	·38	6-7	4⅛
January 1933 ...	1·50	1·50	1·50	1·50	1·25	1·38	·38	·25	·31	6-7	4⅛
February ,, ...	1·50	1·50	1·50	1·50	1·25	1·38	·63	·25	·44	6-7	4½
March ,, ...	1·50	1·50	1·50	4·50	1·50	3	3·63	1·13	2·88	6-7	3¾
April ,, ...	1·50	1·50	1·50	3·25	2	2·63	2	0·5	0·88	6-7	4⅛
May ,, ...	1·50	1·50	1·50	2·5	2	2·13	0·5	0·5	0·5	6-7	4½
June ,, ...	1·50	1·50	1·50	2	1·5	1·75	0·375	0·375	0·38	7-8	4½
July ,, ...	1·50	1·50	1·50	1·75	1·5	1·63	0·5	0 375	0·44	6-7	3⅜
August ,, ...	1·50	1·50	1·50	1·5	1·5	1·5	0·5	0·25	0·44	6-7	2¼
September ,, ...	1·50	1·50	1·50	1·5	1·25	1·38	0·25	0·25	0·25	6-7	2¼
October ,, ...	1·50	1·50	1·50	1·25	1·25	1·25	0·25	0·25	0·25	6-7	2¼
November ,, ...	1·50	1·50	1·50	1·5	1·25	1·25	0·5	0·25	0·38	6-7	2¼
December ,, ...	1·50	1·50	1·50	1·5	1·25	1·38	0·6	0.5	0·6	6-7	2⅝
January 1934 ...	1·50	1·50	1·50	1·5	1·25	1·38	0·5	0·5	0·5	6-7	4½
February ,, ...	1·50	1·50	1·50	1 5	1·25	1·88	0·5	0·5	0·5	6-7	4½
March ,, ...	1·50	1·50	1·50	1·5	1·00	1·13	0·5	0·25	0·36	6-7	6

Prices of representative securities of the Government of India and of the British 4% Funding Loan (1960—90)

	1926-27				1927-28				1928-29				1929-30			
	3½% Rupee Paper		4% British Funding Loan (1960-90)		3½% Rupee Paper		4% British Funding Loan (1960-90)		3½% Rupee Paper		4% British Funding Loan (1960-90)		3½% Rupee Paper		4% British Funding Loan (1960-90)	
	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L
April ...	77/6	74/6	87/10	85/10	79/5	78/11	87⅛	86⅛	75/9	75/6	92½	88¾	72/4	71/3	88⅜	86⅞
May ...	78/9	76/6	87/7/6	86/10	79/4	77/13	87⅝	86¾	75/9	75/8	90⅝	90	72/5	71/8	88⅜	87⅛
June ...	77/6	76/3	86/5/	86/7/6	78/1	77/12	86⅞	85⅞	75/10	75/8	91	90¼	71/6	67/14	88	85⅜
July ...	77/3	77	86⅝	86	78	77/7	85⅞	86¾	75/9	74/2	90⅝	89⅝	68/7	67/6	87	85
August ...	77/6	77/3	86	84¼	77/13	75/12	87	86⅝	74/1	73/6	90⅛	89¼	68/6	67/6	85⅛	84¾
September	77/6	77/3	86	84¼	76/5	75/7	87⅝	85½	73/14	72/14	90⅜	88⅛	68/14	68/7	84⅞	82⅞
October ...	77/9	77/5	84⅝	84	76/6	76/2	85⅞	85⅝	73/8	73/1	88⅞	88¼	68/13	67/14	87	82⅝
November	77/13	77/6	84⅛	84½	76/5	75/10	85⅞	85¾	73/6	72/14	90⅛	89¼	68/6	67/15	85⅞	84
December	78/15	77/10	85¾	84¾	75/9	74/6	88¾	85⅞	73	72/4	90⅛	89¾	68	67/12	85¾	85¼
January ...	78/2	77/5	87⅝	85¼	76/2	75/2	89⅞	88¾	73/6	72/8	91⅜	90⅛	68	64/6	87	85½
February	77/12	77/5	87¾	86⅜	76/3	75/13	89¼	88¼	73/6	71/14	91½	88⅞	65/10	64/1	83	86½
March ...	78/14	77/7	87¼	86	76	75/6	89¾	88⅜	72/3	71	88⅝	86⅛	69/10	64/9	93	87⅝

	1930-31						1931-32						1932-33						1933-34					
	3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960-90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960-90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960-90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960-90)	
	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L
April ..	68/14	64/1	65½	62¾	91	89⅛	63	62/9	61	59	94½	92⅜	62⅝	60½	67	65	97	95⅛	88¾	86⅞	87½	‘5¼	111⅝	110½
May ...	65/5	64/14	63	61	90¾	88½	62/9	61/13	60¼	59⅛	96⅞	94⅝	63¾	62	70½	66	100⅝	97½	88	79½	86¼	79¾	110½	108½
June ...	65/5	64/11	62½	60½	90¾	88¾	61/8	68/13	60	53	97⅜	96⅛	63¼	60¾	75½	66	102¾	100⅛	81½	79 9/16	80⅞	79½	110¾	109⅜
July ...	65/2	62/1	63¼	60½	91¾	89⅞	61/8	59/4	63¾	51	97⅝	95¼	70	66⅞	83	79½	108¾	106⅜	85 9/16	81⅜	83	77¾	110⅜	109¼
August ...	64/10	63	64½	63	91¾	90⅜	59/8	57/1	57	54	92⅞	90⅝	69⅞	68¼	81	75	107⅞	106	85¾	84½	84	82	111½	109¾
September	65/6	64/4	65¾	63¾	92½	90¾	57	52	55	43½	92⅛	79½	69 9/16	68¼	82½	79	110	107⅝	85 11/16	83⅜	86¼	82½	112	111½
October ...	65/2	64/6	66¼	63½	94⅝	90⅞	53/14	51	53½	47	88¾	83	76	70	90	85	109⅝	107¼	83¾	81 15/16	87½	86¼	111¾	110¼
November	65/3	64/10	65½	64	96⅞	94¾	55/10	53	55	49	86½	81¾	76⅛	71⅛	92	83½	109¾	105¼	83⅝	81½	87½	84¾	111¾	110½
December	64/11	63	65¼	62¼	95	93⅝	53/2	51/12	50½	47½	82	72	74 5/16	71 9/16	88¼	83½	108¾	107¼	82¼	80 11/16	86¾	83½	111⅞	111½
January ...	63/4	62/10	64½	60	95¾	94¼	54/8	51/7	59	51	86⅝ (a)	84¾ (a)	80½	74 11/16	99	86½	110	108½	83 13/16	82⅝	88½	86¾	112⅜	111¾
February	62/11	61/9	60	57	94¾	89½	61/12	53/9	63	56	86⅝ (a)	86⅝ (a)	83 7/16	80 13/16	99⅝	99⅛	110⅜	109⅞	86 11/16	84 1/16	90¼	87¾	113	111⅞
March ...	63/14	61/5	62	58	93¼	91	61/12	60/2	68¼	63½	86⅝ (a)	86⅝ (a)	88 9/16	81 9/16	101¼	99	112½	110¼	88 11/16	86 15/16	92½	89¾	110⅞	110¼

NOTE—‘H’ means ‘Highest’ and ‘L’ ‘Lowest.’

(a) Quotations nominal.

Statement showing the interest-bearing obligations of the Government of India at the close of each financial year ending 31st March.

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
	(In Crores of rupees)									
In India—										
Loans (*a*)	370·8	368·3	374·4	372·3	390·7	405·1	417·2	422·7	446·91	435·17
Treasury bills in the hands of the public	...	...	...	7·6	4·0	36·0	55·4	47·5	26·09	38·81
Treasury bills in the Paper Currency Reserve ...	49·7	49·6	41·5	31·9	89·2	29·2	5·9	49·7	85·48	25·93
Ways and Means Advances ...								9·5		
Total Loans, etc.	420·0	417·9	415·9	411·8	433·9	470·3	478·5	529·4	508·48	494·41
Others Obligations—										
Post Office Savings Banks ...	25·6	27·2	29·5	32·7	34·5	37·1	37·0	38·2	43·33	52·82
Cash Certificates	13·1	21·0	26·7	30·7	32·3	35·0	38·4	44·6	55·68	68·72
Provident Fund, etc. ...	42·4	46·4	51·0	55·8	60·5	65·4	70·3	73·0	76·55	82·14
Depreciation and Reserve Funds	9·1	15·5	20·1	25·5	31·1	30·2	21·4	17·6	16·85	15·36
Provincial Balance (*b*) ...	4·8	11·8	10·5	10·5	10·4	10·2	6·1	4·3	4·66	4·42
Total other Obligations	95·0	121·9	137·8	155·2	168·8	177·9	173·2	177·8	197·02	217·96
Total in India ...	515·0	539·8	553·7	567·0	602·7	648·2	651·7	707·2	705·50	712·37
	(In millions of £)									
In England—										
Loans (*a*)	(*c*) 263·4	266·4	(*e*) 265·1	272·3	283·3	289·0	316·8	313·6	314·32	320·61
War Contribution ...	18·8	18·3	17·8	17·3	16·7	16·7	16·7	16·7	16·72	16·72
Capital value of Liabilities undergoing redemption by way of terminable Railway annuities	58·8	57·5	56·2	54·8	53·4	51·9	50·3	48·7	47·06	45·35
India Bills						6·0				
Imperial Bank of India Loans							4·1			
Provident Funds, etc. ...	0·2	0·2	0·3	0·2	0·4		0·7	0·8	0·92	1·02
Total in England ...	341·2	342·4	339·4	344·6	353·8	366·1	388·6	379·8	379·02	383·70
	(In Crores of rupees)									
Equivalent at 1s. 6*d*. to the Rupee	454·9	456·6	452·5	459·5	471·8	488·2	518·1	506·5	505·86	511·60
Total interest bearing Obligation	970·0	996·4	1,006·2	1,026·4	1,074·5	1,136·5	1,169·9	1,213·6	1,210·86	1,223·97
Interest-yielding Assets held against the above obligations										
(*i*) Capital advanced to Railways	(*d*) 578·0	(*f*) 605·6	635·5	668·6	700·7	730·8	744·0	750·73	751·54	751·20
(*ii*) Capital advanced to other Commercial Depts. ...	22·0	17·8	19·2	20·7	21·8	22·7	23·7	23·75	24·49	22·55
(*iii*) Capital advanced to Provinces	106·4	114·6	120·2	126·3	137·5	142·6	151·8	163·64	171·79	176·72
(*iv*) Capital advanced to Indian States and other interest-bearing loans	10·2	11·8	12·1	13·9	15·5	17·6	19·4	20·29	21·05	21·20
Total interest-yielding Assets	716·6	749·8	786·9	829·5	875·5	913·7	938·9	958·41	968·87	977·67
Cash, Bullion, and Securisies held on Treasury Account	57·4	52·0	30·5	24·3	24·3	45·4	34·0	41·42	35·07	44·79
Balance of total interest-bearing obliations not covered by above Assets	196·0	195·6	181·8	172·5	170·6	177·4	197·0	216·5	206·92	201·51

(*a*) Thise figures represent the nominal amounts of loans outstanding and also include comparatively small amounts of expired loans which do not bear interest.

(*b*) The figures represent those portions of Provincial balances which bear interest either because they form part of the Old Famine Insurance Fund or the present Famine Relief Fund or because they have been placed with the Government of India on fixed deposit.

(*c*) Includes the liability assumed by the Secretary of State for East India Railway Debenture Stock. aggregating £18¾ millions, on the termination of the Contract with that Railway on the 1st January, 1925. It therefore does not represent any increase in the foreign indebtedness of the country as a whole.

(*d*) Includes 27·07 crores on account of the liability referred to in (*c*) above.

(*e*) Includes the liability assumed by the Secretary of State for the Great Indian Peninsula Railway Debenture Stock, aggregating £3½ millions, on the termination of the Contract with that Railway on 1st July, 1959. *Vide* also last sentence under (*c*) above.

(*f*) Includes 4·88 crores on account of the liability referred to in (*e*) above.

Imperial Bank of India Official rates of interest.

1923		per cent.	Average for whole year.
11th January	...	8	
25th May	...	7	
31st May	...	6	
7th June	...	5	5·947
28th June	...	4	
15th November	...	5	
29th November	...	6	
20th December	...	7	
1924			
3rd January	...	8	
14th February	...	9	
10th April	...	8	
29th May	...	7	
19th June	...	6	6·682
3rd July	...	5	
31st July	...	4	
21st August	...	5	
16th October	...	6	
1925			
22nd January	...	7	
21st May	...	6	
18th June	...	5	5·642
2nd July	...	4	
24th September	...	5	
3rd December	...	6	
1926			
20th May	...	5	4·825
10th June	...	4	
1927			
1st January	...	5	
13th January	...	6	
10th February	...	7	
2nd June	...	6	
23rd June	...	5	5·720
28th July	...	4	
8th September	...	5	
8th December	...	6	
2nd December	...	7	

1928		per cent.	Average for whole year
21st June	...	6	
19th July	...	5	6·196
15th November	...	6	
18th December	...	7	
1929			
14th February	...	8	
11th April	...	7	
9th May	...	6	
6th June	...	5	6·328
10th October	...	6	
31st October	.	7	
1930			
3rd April	...	6	
10th July	...	5	5·887
20th November	...	6	
1931			
22nd January	...	7	
28th May	...	6	7·046
6th August	...	7	
24th September	.	8	
1932			
14th January	...	7	
25th February	...	6	5·021
28th April	...	5	
7th July	...	4	

1933

From 16th February till the end of March, 1934

Indian Money Rates at the beginning of each month from 1928-29 to 1933-34

	1928-29			1929-30			1930-31			1931-32			1932-33			1933-34		
	Imperial Bank rate	CALL MONEY RATE		Imperial Bank Rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE	
		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay
April ...	7	5½	5½—5¾	8	5	6½	6	5	6	7	4½—5	6¼	6	3½	5½	3½	6—7	4⅛
May ...	7	5½—5¾	5¾—6	7	2½	3½	6	4½—4¾	5	7	4½	6¼	5	3	5	3½	6—7	4½
June ...	7	4	5¾—6	6	1½	3¼	6	4½	5	6	5	5¼	5	2½	3¼	3½	7—8	4½
July ...	6	3	4¼—4½	5	1½	1½	6	4½	5	6	4	4½	5	2	4	3½	6—7	3⅜
August ...	5	2¼	2½—3	5	Nil	1½	5	2½	2½	6	4½	5	4	2	2	3½	6- 7	2¼
September	5	3½	3¼—3¾	5	1½	1½	5	1¾	2	7	4	5¼	4	1¾	1¾	3½	6--7	2¼
October ...	5	2¼	2 —2¼	5	2½	3 —3½	5	2½	2¼	8	5	6½	4	1¾	1	3½	6—7	2¼
November	5	2 —1½	3	7	2	2½	5	2¼	2	8	4	4½	4	1½	2	3½	6—7	2¼
December	6	1½	3	7	1½	4½	6	2	2¼	8	4 —4½	6½	4	1¾	1	3½	6—7	2⅝
January ...	7	4 —4¼	6½	7	3	5	6	3	3	8	4½—5	6½	4	1¾	1½	3½	6—7	4⅛
February	7	6	6¼—6½	7	4½—5¼	6½	7	3½—4	5½	7	4	5	4	¾	1	3½	6—7	4½
March...	8	6	7¼	7	5	4¾	7	4½—5	5¾	6	3½	4	3½	¾	¾	3½	6—7	6

TRADE SECTION:

FOREIGN TRADE

A statistical study of the Trade of India is incomplete without a study of both the internal and the external trade. So long we have interested ourselves mainly with the foreign sea-borne trade, which no doubt covers the bulk of the total trade. Even here the figures of sea-borne trade alone do not tell the whole tale. They leave out of account the frontier trade, and also the trade partly unregistered carried by the French and Portguese Settlements and by ports in the Native States of the West coast of India, namely, Kathiawar, Cochin, Travancore, etc. "the not inconsiderable value of stones and pearls re-exported through the parcel post, and cash and articles of jewellery, etc. brought into and taken out of the country by travellers". Besides there is a large volume of traffic in commodities transported coastwise betwetn ports in India and Burma and along the railways the interior, both of which should figure in the trade statistics. The trade of India for the year under review has been presented on this new basis.

SEA-BORNE

The monsoon was on the whole good and well distributed, although the crops in certain parts of the country, notably the Central Provinces, Berar, and the United Provinces were damaged by prolonged or excessive rain. The general level of wholesale prices according to the Calcutta Index numbers does not show any substantial rise, although three of the larger exports* registered a large gain both in quantity and in prices during the year, namely, linseed, tea, and shellac. The increased export of linseed was mainly due to the United Kingdom and was a direct result of the preference obtained by India through the Ottawa Agreement. The better prices for tea was due to the success of the restriction scheme. There was definite decline in the price fetched by the rice crop, and Burma, which is largely dependent for its revenue on the sale of its surplus rice, suffered a serious loss. It is estimated that in the last four years the income from this source has fallen by about Rs. 24 crores. There is, in fact, evidence in some districts of Burma that there was a reversion to the system of barter in the rural areas, paddy and rice being exchanged for other necessities without the intervention of money.

1933-34 is the first year in the last quinquennium to record a definite improvement in the foreign trade of India over the previous year. Though the economic depression is generally dated, and with ample reason, from November, 1929, it should not be forgotten that even 1929-30, showed exports of only Rs. 317.94 crores as against 337.96 crores in 1928-29. The decline in our foreign trade, which started in that year, has continued without a break up to the end of 1932-33. It is, therefore, a genuine gratification that the last financial year shows an appreciable improvement in our exports, though the foreign trade of India, taken as a whole, that is, the grand total of imports, exports and re-exports amounting to Rs. 265 crores, showed a decrease of Rs. 3 crores or 1 per cent. as compared with the previous year. It is significant that this grand total is but a fraction of India's export trade in the years preceding the depression and it is not much in excess of India's imports in 1928-29. The figures of foreign trade, as a whole, might have made a better showing, but for the decrease in our imports, which is due primarily to the protectionist policy we have pursued during these years. Nevertheless, the picture of India's foreign trade is by no means as sombre as a year or two ago and 1933-34 may well be said to have marked the end of the prolonged trade depression.

It may be emphasised that conditions in foreign markets have not improved very much as compared with the earlier years. The barriers to international trade have continued as high and as strong as ever; and in some cases duties on imports from India have been increased. But a prolonged restriction of imports, together with the cheapening of credits and additions to currency in countries which have followed the policy of inflation, has set in motion new forces which have enabled India's export trade to move out of the morass into which it had fallen. It is for this reason that we find that 1933-34 accounts for exports of Rs. 146.31 crores against Rs. 132.41 crores in 1932-33. In common with this increase of Rs. 13.90 crores, re-exports also showed a rise of Rs. 20 lakhs to Rs. 3.42 crores. Total exports thus show an improvement of 10.4 per cent. on the previous year. While one might note with satisfaction the increase that has now occurred, it is necessary to remember that at Rs. 149.73 crores, the total exports of India are less than half of the exports of 1929-30, which, it should be remembered, includes at least 5 months of the economic depression.

As compared with exports, imports have suffered even more seriously during these years. But it has by no means been a tale of unbroken decline, as in the case of the export trade of India. The first drop occurred in 1929-30 when imports declined from Rs. 253.24 to Rs. 240.80 crores. 1930-31 brought it down to Rs. 164.82 crores. But in 1932-33 imports rose to Rs. 132.58 crores from Rs. 126.37 crores in the previous year. In assessing, therefore, the loss or gain in our export and import trade, it is well to remember that during the time the import trade improved to such extent, exports had a big drop from Rs. 160.54 crores in 1931-32 to Rs. 135.63 crores in the following year. It may be said that imports in 1933-34 are not lower than they should be, if they had followed the same course during the depression as our export trade. In spite of the fact that India has been following a protectionist policy and that, as a result the staple imports has suffered a very serious shrinkage, there has been as yet no disequilibrium between our exports and imports. Considering that India's purchasing power during these years has been derived not only from her export trade but from her export of gold, there is everything to be said for a continued reduction in our consumption of foreign goods.

The balance of transactions in treasure though, no doubt, as has been mentioned already, very considerable, nevertheless, shows a decline from Rs. 64.93 crores in 1932-33 to Rs. 57.23 crores in the period under review. And for this, the exports of gold offer an adequate explanation inasmuch as during the year only 6,830,000 ounces of gold were exported against 8,526,000 ounces in 1932-33. Owing to the higher price which gold commanded during the year, a proportionate fall in value has been avoided and export of gold amounted in value to Rs. 58.15 crores against Rs. 56.84 crores in the previous year. Imports of gold amounted to only Rs. 1.10 crores against Rs. 1.72 crores in the previous year.

The balance of transactions in silver showed a net export of Rs. 6.36 lakhs. The gross export on private account was Rs. 80 lakhs against Rs. 90 lakhs in the previous year. There was a large export on Government account, namely, Rs. 6,37 lakhs, out of which Rs. 3,89 lakhs represents the value of silver exported to the United States of America in June and July on account of the part payment of Britain's War debt in silver. This reduces the net import of silver on private account to Rs. 1 lakh only as compared with Rs. 73 lakhs in 1932-33. The total visible balance of trade comes to Rs. 91.94 crores as compared with Rs. 68.29 crores in 1932-33 and Rs. 90.48 crores in 1931-32. The improvement of Rs. 23.65 crores over the last year is the combined result of an increase of about Rs. 14 crores in the exports of merchandise and a decline of Rs. 17 crores in the imports of foreign merchandise. There was also a fall of Rs. 8½ crores in the exports of gold and of over half a crore in the imports of silver on private account. The balance of trade in merchandise in the present year is only 34 per cent. of the average of the ten post-war years ending 1930-31 and 46 per cent. of the average of the ten pre-war years ending 1913-14. Taking into account the remittances, for which Government statistics are available, of which Rs. 59.97 crores is the biggest item, the total visible balance of accounts comes to Rs. 31.50 crores.

Before examining the changes in the volume, value and direction of the chief exports of India, it is well to examine the changes in the price levels of the export staples of the country. The following

table gives the changes in the index numbers of India's principal exports:—

(Basis 100 end of July, 1914)

	Sept. 1933	March 1934	Sept. 1931	March 1932	Sept. 1932	March 1933
Cereals ...	73	70	68	61	68	61
Pulses ...	91	86	93	81	83	84
Tea ...	63	60	58	70	104	144
Oil Seeds ...	78	74	77	69	73	83
Jute, Raw ...	51	49	50	38	38	42
Jute, Manufactured ...	69	76	82	68	75	79
Cotton, Raw ...	74	89	95	79	82	72
Hides and Skins	51	54	53	54	57	59

It will be seen from the table that, with the exception of tea, the anticlimax of price levels was reached in March, 1933 and since then there has been a distinct betterness in the trend. The substantial rise in the price of tea is the most remarkable feature, which was due to successful operation of the restriction of tea-export scheme referred to last year. The year as a whole is indicative of a gradual rise in the prices of all export staples, with the exception of cereals and raw cotton. The price of the former rose by 7 points between March and September 1933, but again fell by about the same extent to 61 in March, 1934. Raw cotton rose from 79 in March 1933 to 82 in September and again fell to 72 in March 1934, the decline having been governed largely by conditions in the United States of America where measures to restrict the crop have been under consideration but have not so far been made entirely effective.

There was a revival both in the volume and value of all staple commodities exported, with the exception of a few like rice. In the case of tea, however, the quantity decreased but fetched a better price owing to the export restriction mentioned above. The following table taken from the Report of the Controller of Currency for 1933-34 enables an appreciation of the main features of the export trade in the year under review:—

(Omitting 000)

	1932-33 Quanti	1932-33 value Rs.	1933-34 Quanti Rs.	1933-34 value Rs.
	tons			
Jute ...	1,243	31,44,21	1,420	32,30,76
Cotton ...	368	20,37,21	489	26,58,94
	lbs.			
Tea ...	378,837	17,15,28	317,844	19,84,62
	tons			
Rice ...	1,887	14,45,85	1,744	10,56,66
Oilseeds ...	732	11,30,68	1,124	13,66,15

Exports of raw jute rose from 3,153,000 bales to 4,190,000 bales in 1933-34 and the value likewise increased from Rs. 9,73 lakhs to Rs. 10,93 lakhs. But considered in conjunction with the fall in the volume and value of our exports of jute manufactures, the increase of the exports of raw jute can hardly be regarded with any satisfaction.

Those who have followed the fortunes of the jute industry during the last one year, know only too well that, as a result of a policy of restriction of output which was relaxed only recently, the competitors of the Calcutta mills had been able to capture more of the foreign markets. It will thus be seen that the increase in the value of our exports of raw jute can be regarded more as an indication of the loss sustained by India's jute manufactures than as a gain for the cultivators of the raw material in this country. Countries in the British Empire as well as foreign countries increased their offtake of India's jute, the exports to the British Empire rising from 733,000 bales in 1932-33 to 1,017,000 bales in 1933-34, the corresponding figures for foreign countries being 2,420,000 and 3,173,000 bales. The United Kingdom raised her purchases from 725,000 bales to 923,000. The exports to the United States of America rose from 201,000 bales to 295,000, while France, Italy and Germany imported during the year 469,000, 364,000 and 985,000 bales respectively as compared with 386,000, 210,000 and 735,000 respectively during 1932-33. There was a slight increase in the exports to Japan from 81,000 to 91,000 bales. All the other foreign countries contributed partly to the improvement in the raw jute exports, but the imports into Spain fell from 237,000 bales to 200,000. Comparing the rise in the volume of raw jute exports with the rise in value, 1933-34 cuts a better figure than its predecessor 1932-33, partly due to the slightly more favourable price obtained for raw jute.

Jute manufactures, as pointed out above, have failed even to hold their ground, there having been a fall in the volume from 680,000 tons to 6,72,000 tons and in value from Rs. 21.71 lakhs to Rs. 21.37 lakhs. Exports of jute bags fell from Rs. 11,16 lakhs to Rs. 972 lakhs, mainly due to a large decrease in the exports to the British Empire from Rs. 543 lakhs to Rs. 3,40 lakhs. The declared value per bag fell from As. 4 pies 4 to Rs. 3-8-0. Export of gunny cloth rose from 101 crores of yards in 1932-33 to 105 crores

of yards in 1933-34, but it is far too below the peak figure of 165 crores of yards in 1929-30. Exports to the United Kingdom fell slightly from 5,75 lakhs of yards to 5,16 lakhs, while the United States raised its imports from 54,38 lakhs to 64,77 lakhs of yards. Considering the British Empire as a whole there was a slight increase from 15,80 lakhs to 16,65 lakhs or an increase of only 0.2 per cent. Argentine contributed to a fall in its imports of Indian gunny cloth from 23,75 lakhs of yards to 16,96 lakhs.

Exports of tea as said elsewhere present an interesting feature. The total quantity exported during 1933-34 fell to 318 million lbs. from 379 million lbs. in 1932-33 ; while the value rose to Rs. 19,85 lakhs from Rs. 17,15 lakhs in 1932-33. This was due to the better price obtained as a result of the tea export restriction. The declared value rose from As. 7-3-0 a lb. to as. 9 11ps. Exports to the United Kingdom fell from 331 million lbs. to 277 millions, and the total exports to the parts of the British Empire declined to 299.5 million lbs. from 355 million in the previous year. The foreign countries accounted for a decrease of about 6.5 million lbs.

Raw cotton exports rose from 2,061,000 bales in 1932-33 to 2,740,000 bales in 1933-34 and in value from Rs. 20,37 lakhs to 26,59 lakhs. The United Kingdom nearly doubled her imports or raw cotton which rose from 168,000 bales to 342,000 in the present year. The imports into China which fell considerably last year appears to have recovered partially rising from 134,000 bales to 336,000. The declared value fell from Rs. 27-12-10 per cwt. to Rs. 27-2-7. The total exports of raw cotton during 1933-34 would have been greater, but for the Japanese Boycott which was not lifted till January 1934. As a measure of retaliation against the measures adopted by the Government of India under the safeguarding of Industries Act, Act XIII of 1933, "to protect their markets which were being flooded with cheap Japanese products certain cotton interests in Japan instituted a boycott of Indian raw cotton which lasted from July to December". This was lifted in January 1934, after the successful conclusion of the Indo-Japanese trade agreement. Since then up to the end of the financial year the demand for raw cotton from Japan became quite active almost hectic we might say, but for which the total exports of raw cotton would have cut a more sorry figure. Taking the value of raw coton exports into consideration, the increased exports were chiefly to the United Kingdom Rs. 176 lakhs, and Germany Rs. 75 lakhs.

Rice exports were even much worse during the year 1933-34 than during the previous year. They fell from 1,828,000 tons in 1932-33 to 1,733,000 tons in 1933-34 and the value diminished by Rs. 3,71 lakhs from 14,23 lakhs to 10,52 lakhs. Imports of rice into United Kingdom rose from 75,000 tons in 1932-33 to 116,000 in 1933-34 and the value advanced by Rs. 10 lakhs. Ceylon increased her offtake from 394,000 tons in 1932-33 to 403,000 tons in 1933-34 but in value diminished by Rs. 70 lakhs from Rs. 340 lakhs to Rs. 270 lakhs. Other parts of British Empire have increased their imports of Indian rice from 252,000 tons in 1932-33 to 271,000 tons in 1933-34, but the value fell from Rs. 1,98 lakhs to Rs. 170 lakhs. China has reduced her custom of Indian rice from 234,000 tons in 1932-33 to 172,000 tons in the following year, while the reduction in value was almost fifty per cent. Japan has practically ceased her imports of rice which dwindled from 740,000 tons in 1932-33 to nothing in the present year, owing to the possibility of growing the staple product in Manchuko.

Export trade in wheat has of late paled in significance, especially during the last few years. Indian wheat has lost its vantage position in world markets since the war which can be easily comprehended by comparing the pre-war war, and post-war average exports with the exports since then. From about 1,308,000 tons during the pre-war years, the quantity fell to 807,000 tons in the war period quinquennium and to 237,000 tons in the post-war regime. Since then wheat has scarcely even once retrieved its lost ground and to-day in 1933-34 exports amounted to a bare 2,100 tons, almost a paltry nothing.

Hides and skins have also seen a good year of exports. Both raw and tanned or dressed hides and skins have shown a marked improvement, though a big spurt is visible only in the former. During the year 1933-34, 41,640 pieces of raw hides and skins were exported against 27,274 in 1932-33 and 35,566 in 1931-32. And the value of the exports during the last three years is Rs. 3.66 crores, Rs. 2.77 crores and Rs. 4.25 crores, respectively. Tanned or dressed hides accounted for Rs. 2.41 crores in the year under review against Rs. 1.62 crores in the previous year and Rs. 2.13 crores in 1931-32. And tanned or dressed skins at Rs. 3.24 crores were well above the level of the previous two

years (Rs. 3.14 crores in 1931-32 and Rs. 3,04 crores in 1932-33). It will be seen that the total of tanned or dressed hides comes to Rs. 5.64 crores in 1933-34, Rs. 4.66 crores in 1932-33 and Rs. 5.26 crores in 1931-32. Of this trade in tanned hides and skins Madras has had the lion's share, having exported Rs. 2.90 crores of tanned hides and Rs. 2.29 crores of tanned skins. In the raw hides trade, Bengal has the biggest share. Exparts of pig Iron and pig lead at Rs. 85.02 lakhs and Rs. 1,52 lakhs though well above the level of 1932-33, are still below the figures for 1931-32.

Exports of manganese ore have shot up to 266,000 tons in 1933-34 as against 198,000 tons in 1932-33, but the value rose by less than 3 lakhs only as the declared value oper ton fell considerably from Rs. 23-12-10 to Rs. 19-4-10. It is stated generally, that the price of manganese ore in the international market has fallen much and that the Indian railway freight is not favourable enough to push this commodity in large bulk into the world markets, for compare only the figures for 1929-30 when 816,000 tons of this ore went out of India.

Amongst exports of oil-seeds, Groundnuts have somewhat regained a lost market. In 1932-33 the volume of export fell to 133,000 tons from 672,000 tons in the previous year, but in the year under review there has been an appreciable rise to 546,500 tons. On the other hand the value of the exports fell from 7,12 lakhs in 1932-33 to Rs. 6,63 lakhs in 1933-34, mainly due to the fall in values of the commodity.

The declared value per cwt. was Rs. 6-1-1 only as against Rs. 8-3-7 in the previous year. France who used to consume abundant quantities of groundnuts reduced her off-take from 219,000 tons in 1932-33 to 149,000 tons in 1933-34. Exports to Belgium rose by about 2,000 tons to 10,000 tons, while Italy took in as much as 67,000 tons, as compared with her imports in the previous year of about 28,000 tons only. Imports of Indian groundnuts into Germany expanded from 48,000 tons to 72,000 tons in 1933-34, while the largest contribution came miscellaneous other smaller units whose raised their off-take from barely 10,000 tons ddring the year under review.

The trade in linseed has a new importance, as among the exports of India, it is almost the sole beneficiary of the Trade Agreement arrived at Ottawa. During the year exports of linseed amounted to Rs. 4.57 crores against Rs. 91 lakhs in 1932-33 and Rs. 1.53 crores in 1931-32. As need hardly be said, the chief customer of India's linseed during the year is the United Kingdom which accounted for Rs. 180.69 lakhs against about Rs. 16½ lakhs in the two previous years. Next only to the United Kingdom comes the "other countries," exports to which has increased to Rs. 132 lakhs from Rs. 1.75 lakhs in 1932-33, to which it had dwindled from Rs. 14.89 lakhs in 1931-32. It is noteworthy that every country, which has been a consumer of India's linseed, has increased its offtake during the year very markedly, though of Germany and France, it might be said that their offtake is below the level of 1931-32.

The figures of export of Linseed for the last three years as noted below will be of much interest:—

Year.		Quantity in Tons.	Value in Rupees.
1931-32	...	120,000	1,53,11,000
1932-33	...	72,000	91,11,000
1933-34	...	379,000	4,57,51,000

The import trade especially during these years has to be examined from different view points. Time was when one could altogether ignore the import trade and fix the attention only on exports and the trade balance to assure oneself that there was a rough balance of payments. But now India's import trade is subject to negotiations and concessions. To begin with, we have the Ottawa Trade Pact; then came the Indo-Japanese Trade Agreement. There has also been the great fillip to our policy of protection to indigenous industry. And it also must be remembered that the import trade has behaved during the depression in a somewhat strange manner, going up while exports were on the increase. This last, mentioned phenomenon may be explained by the fact that India's purchasing power in foreign countries was greatly augmented in 1931-32 by a sustained flow of gold exports. And though this phenomenon continued during the year under review, its effect on imports into India was neutralised by the growth of indigenous industry and the consequent self-sufficiency of India in regard to certain of her staple imports. It may, therefore, be said that our main interest in the examination of India's import trade is, in the first place, to find out whether the protectionist policy we have followed has been effective in reducing the flow of imports of competitive goods from abroad; secondly,

to assure ourselves whether the trade pacts that we have entered into during the past have resulted in the expansion of our trade in this country, and whether they have not been offset by a decline in trade with other nations.

So far as the effectiveness of protection is concerned, the total imports during 1932-33 are sufficient testimony. For there is no reason to think that India's purchasing power during the last financial year was less than during the year before. On the other hand, the increase in the export trade has only expanded our power to buy abroad. That in spite of this, total imports should have fallen shows clearly that the import trade into this country has received a severe and effective check from the policy of protectionism.

The total imports of private merchandise fell from about Rs. 133 crores during 1932-33 to 115 crores in 1933-34, a fall of nearly 13.7 per cent. which was even much less than in 1931-32 by ebout 11 crores. The principal contributing factors for this decrease in imports during 1933-34 were sugar Rs. 152 lakhs, oils Rs. 119 lakhs, raw cotton Rs. 370 lakhs, raw silk Rs. 46 lakhs, cotton yarns and manufactures Rs. 908 lakhs, other yarns and textile fabrics Rs. 153 lakhs. Notable increase also occured under import of machinery of all kinds Rs. 2,22 lakhs, possibly owing to the rapid expansion of the sugar industry and under vehicles Rs. 95 lakhs.

To take sugar first, for the obvious reason that the sugar industry in India has expanded vastly during the last two years, imports of sugar during the year 1933-34 at 263,700 tons are less than half of those of 1931-32, at 556,274 tons. The value also has been on the decline from Rs. 6.16 crores in 1931-32 to Rs. 4.23 crores in 1932-33 and Rs. 2.71 crores in 1933-34. Of these, the imports of sugar that enjoys protection amounted to Rs. 2.39 crores in 1933-34 against Rs. 3.67 crores in 1932-33 and Rs. 4.42 crores in 1931-32. Imports of salt rose from Rs. 71.98 lakhs in 1931-32 to Rs. 78.96 lakhs in 1932-33; but during the year under review they fell to Rs. 46.88 lakhs. As regards iron and steel, imports rose during the year under review from Rs. 4.48 crores in 1932-33 to Rs. 4.64 crores in 1933-34; but they compare favourable with 1931-32, when India imported Rs. 5.38 crores worth of iron and steel. Of these imports both the protected and the non-protected products have shown equal increases in value as compared with the previous year. But it is interesting to note that, while the non-protected products show an increase in the volume from 75,313 tons to 89,937 tons in 1932-33, the protected varieties show a fall from 161,866 tons to 145,640 tons able number of motor vehicles during 1933-34, the number of cars being 2,227 and 1,715 respectively, and the number of motor buses 3,692 and 1,243 respectively as against the number of cars in 1932-33 being 1,291 and 296 and the number of buses 1,793 and 398 respectively. To a certain extent the United States had retrieved her position in the matter of vehicles which she lost in 1932-33 but not to that extent as in 1929-30.

Of cotton manufactures, imports of twist and yarn amounted during the year to Rs. 2,57½ lakhs against Rs. 3,78.8 lakhs in 1932-33 and Rs. 2,98.88 lakhs in 1931-32. In this trade, Great Britain has the biggest share amounting to Rs. 98.78 lakhs, with Japan as a good second at Rs. 95.67 lakhs. It is noteworthy that, while during the year 1932-33 both Japan and Great Britain were able to increase their imports over the previous year, and have suffered a decline since, Japan maintains, unlike Great Britain, a higher level than that of 1931-32. Imports of hosiery have been on the upward trend during the last three years from Rs. 48.13 lakhs to Rs. 67.41 lakhs and Rs. 77.22 lakhs respectively. Japan has increased her share of the trade from Rs. 41.58 lakhs two years ago to Rs. 72.50 lakhs in the year under review. The piecegoods trade has suffered a serious setback from Rs. 834 lakhs in 1932-33 to Rs. 525.42 lakhs in 1933-34. It is only to be expected, since 1932-33 saw a big rise from the level of the previous year.

The distribution of India's foreign trade during the year is of great interest, as India has concluded her trade negotiations with England and Japan and there is a widespread demand for the Government of India taking up the question of more trade negotiations with foreign countries. It should suffice to point out that the United Kingdom stands in a class by itself, on account of the increase both in her offtake of India's exports and in her imports into this country. It must be pointed out at the same time that, as regards the trade relations between these two countries, a very considerable factor is the invisible imports into India from Great Britain and that, if these are taken into consideration, a large balance of trade in merchandise in India's favour would be more than justified. But on the other hand, not only are Britain's imports into India (Rs. 47.59

crores) in 1933-34 in excess of her offtake of India's exports (Rs. 46.58 crores), but also the extent of the increase in Britain's share of the import trade is more than the extent of her increase in the offtake of India's exports. As for the "other countries" on the assumption that it is good behaviour for foreign nations to import less into our country and take more from us, the United States of America, Belgium, Italy and China are the best boys, while the British Empire, the Netherlands and the non-descripts comprised in "other countries" are at the other end, as they imported more into this country and taken less. Japan stands at the other end of the United Kingdom, having imported less into India than the previous year, with a corresponding reduction in her offtake of India's exports. Germany has barely maintained her position of 1932-33, while Java has no advantage to offer India in return for the place which she has in our import trade.

FOREIGN TRADE THROUGH PORTS OF NATIVE STATES

Kathiawar:

The seaborne trade through the Kathiawar Ports has, of late, been steadily growing in importance owing chiefly to the lower port charges, as compared with Bombay. The following table shows the value of imports and exports and re-exports at the Kathiawar ports from 1925-27 to 1933-34.

Year	Imports	Exports	(In thousands of Rs.) Re-exports
1926-27	3,07,12	11,18	47
1927-28	2,89,60	30,55	62
1928-29	3,96,43	1,27,01	59
1929-30	3,91,96	98,54	84
1930-31	3,62,74	80,70	16
1931-32	2,76,48	67,39	8
1932-33	4,15,07	80,91	5
1933-34	4,17,82	2,46,43	1,29

The accuracy of figures upto 1930-31 is problamatical, as they are from returns prepared in old times and figures recorded in some cases were inclusive of merchandise imported or exported coastwise.

Cochin:

The trade of cochin is of considerable significancce as Cochin is in the *enfant-terrible* among the Indian ports.

Statistics of the trade in Cochin during 1933-34 show that the port has enjoyed a record year and is taking its full share in the revival and development of trade. The figures dispell all apprehensions regarding the future of the port.

It was is May, 1928, that the first steamer entered in the inner harbour at Cochin. The number of steamers which used the port in 1928-29 was 4,79, and every year since then there was a steady increase. The number was 509 in 1929-30; 570 in 1930-31; 604 in 1931-32; 615 in 1932-33. Whereas the increase during these four years was only 136, the increase in 1933-34 alone was 66, the number of steamers which called at the port being 681. Of this, only 3 did not come inside the harbour.

The tonnage of the goods passing through the ports has also grown considerably, as the following figures show:

		Imports	Exports	Total
1930-31	...	3,96,806	1,01,354	4,98,160
1931-32	...	4,55,342	90,061	5,45,403
1932-33	...	4,80,585	88,270	5,68,855
1933-34	...	6,40,800	1,08,000	7,38,800

(The figures for 1933-34 are approximate).

When the conversion of the Shoranur-Eranakulam Railway from metre to bread gauge is completed this year, the export trade of the port should benefit considerably.

In this connection the following table showing the total foreign sea-borne and coasting trade of Cochin since 1924-25 will be very interesting; and the figures have been taken from the reports of the Maritime trade for the province of Madras.

Cochin Trade Statistics.

(Value in lakhs of Rupee)

Year	Foreign Trade	Coasting Trade	Total Trade	Percentag total of Madra Presy.
1924-25	3,45	7,01	10,46	11.04
1925-26	4,11	6,38	10,49	11.00
1926-27	4,07	5,87	9,94.5	10.99
1927-28	5,19	6,36	11,55	11.17
1928-29	5,99	6,00	11,99	11,21
1929-30	4,81.5	6,24	11,13.5	...
1930-31	4,53	5,87	10,48	12.49
1931-32	3,73	5,53	9,26	13.00
1932-33	3,79	5,92	9,71	14.50
1933-34	Figures not available.			

Considerable trade is also carried on between the French settlements in India, Portugeese settlements and Travancore. Some twenty years ago the controller of the currency estimated the total imports and exports at the ports in hese non-British possessions at about Rs. 36 lakhs and Rs. 175 lakhs respectively per annum. Certainly the trade hould have grown much more now and trade statistics will be very interesting to-day.

FOREIGN TRADE ACROSS LAND FRONTIERS

Statistics for the external land frontier of India are admittedly imperfect. But even a very rough estimate of about Rs. 10 crores of imports and an equal amount of exports is not a feature to be ignored, although it is definite that the estimate errs on the side of being a little too small.

Prior to April, 1925, the registration of the land frontier trade was done through the Agency of the clerks posted on important roads across the Frontiers.

A new system of registration of the land frontier trade was, therefore, inaugurated since 1st April, 1925. Only the traffic in selected articles at certain railway stations adjacent to the more important trade routes across the frontier is registered. Stations have been selected at which it is estimated that the bulk of inward traffic is intended to be transported beyond the frontier and the bulk of the outward traffic consists of goods which have come from beyond the frontier.

For compilation purposes the registration stations have been divided into three groups. Group (*a*) consists of into the Nushki-Dizdap extension and the trade towards Kandahar. This group will include trade with Persia and Western and Southern Afghanistan. Group (*b*) consists of 31 stations and comprises the trade through the North West Frontier Province and the Punjab with Northern and Eastern Afghanistan, with Kashmir and through them with Central Asia and Turkistan. Group (*c*) consists of 23 stations and comprises the trade through the United Provinces, Bihar and Orissa, Bengal and Assam with Tibet, Nepal, Sikkim and Bhutan.

A similar system of registration has been started in Burma since 1st April, 1926, but the volume of trade passing through Burma is practically insignificant in comparison with the Indian trade.

For purposes of the tables, the trade registered at the three groups of stations mentioned above has been combined into a lump figure for each commodity. Although the table has been introduced for the first time, we shall in our study confine ourselves to the last three years beginning with 1931-32. As regards exports, there appears to be no change in the volume of cotton manufactures during these three years, the figures standing very near 600,000 maunds. Exports of wheat declined from 1,136,000 maunds in 1931-32 to 8,35,000 maunds in 1932-33, but the position improved in 1933-34, the amount rising to 1,116,000 maunds. Husked rice has fairly maintained its volume, although perhaps the money return on this volume must have been on a descending slope. Exports of grain and pulse showed a gradual fall from 1,720,000 maunds in 1931-32 to 1,580,000 and 1,404,000 maunds respectively in the two succeeding years. Exports of salt were on the decline in quantity in the three years 1931-32, 1932-33, and 1933-34 being 1,740,000, 1706,000 and 1,501,000 maunds. Sugar refined and unrefined rose from 843,000 maunds in 1931-32 to 1,054,000 maunds in 1933-34. The most remarkable phenomenon is, however, the tremendous fall in the quantity of silver exported, which fell from 15,151,000 ounces in 1931-32 to 3,97,000 ounces in 1932 33 and 2,081,000 ounces in 1933 34.

Imports across the land frontier during the three years 1931-32, 1932-33, and 1933-34 in respect of certain principal commodities is summarised as in the following table.

(Quantity in thousands of maunds)

	1931 32	1932-33	1933-34
Wheat ...	125	364	338
Grain and pulse	197	422	619
Rice husked and unhusked ...	2,238	2,447	687
Other grains and pulse ...	778	729	379
Borax (from Tibet) ...	10	7	9

Imports of silver during 1931-32 and the two succeeding years were respectively, 4.4, 6.8 and 9.8 million ounces. The high figure for 1933-34 explains the considerable quantity duty free silver imported from Persia.

India's Foreign Trade.

(In Lakhs of Rupees.)

YEAR & MONTH		1 Exports of Merchandise	2 Re-exports of Merchandise	3 Imports of Merchandise	4 Balance of trade in Merchandise (1+2−3)	5 Exports of Treasure	6 Imports of Treasure	7 Balance of transactions in treasure (5−6)	8 Balance of trade in Merchandise and treasure (4+7)
1931-32									
April ...	...	13,65	43	12,56	+1,51	1	63	− 62	+ 89
May ...	...	13,11	39	11,39	+2,11	1	69	− 63	+ 1,48
June ...	...	12,19	39	12,13	+ 45	65	71	− 6	+ 39
July ...	...	12.17	39	10,72	+1,33	1,02	58	+ 44	+ 2,27
August ..	...	12,81	45	9.67	+3,59	54	50	+ 4	+ 3,63
September ...	...	11,60	46	9,88	+2,18	52	85	− 33	+ 1,85
October ...	...	12,66	45	10,00	+3,11	9,34	96	+ 8,38	+11,49
November ...	...	13.77	35	8.93	+5,20	8,72	58	+ 8,14	+13,34
December ...	...	15.59	34	9,26	+6.67	17,86	98	+16,88	+23,55
January ...	...	13,20	37	10.93	+2,63	9,45	37	+ 9,08	+11,71
February ...	...	12,25	30	9,95	+2,60	7,80	20	+ 7,60	+10,20
March ...	...	12,89	34	10,91	+2,32	6,99	20	+ 6,79	+ 9,11
TOTAL 1931-32	...	1,55,89	4,66	1,26,34	+34.21	62,91	7,25	+35,66	+89,87
1932-33									
April ...	...	10,44	28	13,23	−2.53	4,30	22	+ 4,08	+ 1,55
May ...	...	9,57	24	11,82	−2,01	3,35	28	+ 3,07	+ 1,06
June ...	..	9,38	22	12,09	−2,49	4,93	36	+ 4,57	+ 2,08
July ...	...	8,97	23	11.22	−2,02	6,27	53	+ 5,74	+ 3,72
August ...	...	10,02	26	11,13	− 85	4,65	28	+ 4,37	+ 3,52
September ...	..	12,37	24	11,41	+1,20	6,71	20	+ 6,51	+ 7,71
October ...	...	11,50	26	9,98	+1,78	5,78	14	+ 5,64	+ 7,42
November ...	...	12,10	27	11,14	+1,23	6,82	23	+ 6,59	+ 7,82
December ...	...	12,09	40	9,31	+2.58	10,21	21	+10,00	+12,68
January ...	...	11,44	28	10,66	+1,06	4,85	23	+ 4,62	+5,68
February ...	...	12,24	21	9,23	+3,22	5,05	15	+ 4,95	+8,17
March ...	...	12,35	32	10.88	+1,79	5,97	18	+ 4,89	+6,8
TOTAL 1932-33	...	1,32,45	3,21	132.60	+3.06	67,99	3,01	+64,98	+68.04

India's Foreign Trade.—(*Contd.*)

(In Lakhs of Rupees.)

YEAR & MONTH	1 Exports of Merchandise	2 Re-exports of Merchandise	3 Imports of Merchandise	4 Balance of trade in Merchandise (1+2—3)	5 Exports of Treasure	6 Imports of Treasure	7 Balance of transactions in treasure (5−6)	8 Balance of trade in Merchandise and treasure (4+7)
1933-34								
April	10,20	22	9,69	+ 73	4,61	14	+ 4,47	+ 5,20
May	10,60	25	9,75	+1,10	5,31	22	+ 5,09	+ 6,19
June	12,73	27	8,63	+4,32	5,70	14	+ 5,56	+ 9,88
July	12,17	25	8,70	+3,72	2,72	9	+ 2,63	+ 6,35
August	14,02	32	9,91	+4,43	4,54	12	+ 4,42	+ 8,85
September	11,32	31	8,75	+2,88	5,82	14	+ 5,68	+ 8,56
October	12,61	30	10,61	−2,30	3,52	23	+ 3,29	+ 5,59
November	12,84	35	10,01	+3,18	2,61	20	+ 2,41	+ 5,59
December	11,57	29	9,19	+2,67	2,48	22	+ 2,26	+ 4,93
January	11,40	26	10,67	− 99	6,02	12	+ 5,90	+ 6,89
February	12,54	27	8,75	−4,06	10,30	20	+10,10	+14,16
March	14,32	33	10,67	+3,98	5,56	14	+ 5,42	+ 9,40
TOTAL 1933-34 ..	1,46,32	3,42	1,15,38	+34,36	59,19	1,96	+57,23	+91,59

Table Showing the volume of principal articles Exported from British India.

(Figures in Thousands unless stated otherwise)

Name of Article		Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Cotton,—Raw	(tons)	430	391	5,21	7,27	7,01	423	368	489
,, Waste	(cwts.)	...	...	3,12	2,30	2,20	246	238	283
,, Piecegoods	(millions of yds.)	90	1,55	1,64	1,32	98	105	66	56
,, Twists & Yarn	(millions of lbs.)	193	130	82	25	23	22	15	16
Jute, Raw	(tons)	764	464	5,54	807	620	587	563	748
,, Gunny Bags	(in millions No.)	339	716	4,04	5,22	434	389	415	401
,, ,, Cloth	(in millions of yds.)	970	1,177	1,270	1,651	1,271	1,021	1,012	1,053
Grain, Pulse & Flour	(tons)	...	...	...	2,510	2,613	2,614	2,056	1,870
Rice not in Husk	,,	2,398	1,685	1,462	2,298	2,254	2,301	1,828	1,733
Wheat	,,	1,308	807	237	13	197	20	2	2
Other sorts	,,	715	649	300	299	163	293	226	135
Seeds—Essential	,,	10	8	9	4	4	5	6	8
Linseed	,,	379	270	251	248	257	120	72	379
Groundnut	,,	212	119	195	714	601	672	433	547
Other seeds	,,	852	311	468	229	175	191	221	190
Tea	(in millions of lbs.)	266	323	321	377	356	342	379	318
Leather	(tons)	...	22	15	19	18	16	15	20
Hides & Skins—Raw	,,	78	57	53	53	45	34	27	42
Metals—Manufactures and Ores—									
Iron or Steel	(tons)	42	61	95	648	495	453	337	516
Other Metals	,,	10	11	38	172	158	141	131	156
Manganese Ore	,,	607	474	648	816	486	212	198	266
Other Ores	,,	12	21	37	55	42	23	29	39
Lac	(cwts.)	434	345	416	669	547	464	418	731
Wool—Raw & Manufactures	(in millions of lbs.)	56	51	39	55	35	46	38	64
Paraffin wax	(tons)	12	22	26	66	58	52	45	54
Oilcakes	,,	140	117	136	273	254	291	287	287
Spices	(cwts.)	325	315	318	347	342	321	299	270
Wood & Timber	(tons)	50	29	35	52	40	22	17	27
Rubber,—Raw	(millions of lbs.)	1	8	13	26	23	15	7	16
Coffee	(cwts.)	255	216	226	184	293	156	173	186

Table showing the volume of principal articles Exported from British India—(*contd.*)

(*Figures in Thousands unless stated otherwise.*)

Name of Article		Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-1920 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Opium	(tons	51	14	9	4	4	3	0·4	2·3
Manures	(cwts.)	117	57	118	122	54	53	31	41
Fodder, Bran and Pollards	(tons)	223	129	211	350	262	282	225	254
Dyeing & tanning substances	(cwts.)	1,613	1,261	1,503	1,412	1,463	1,407	1,205	1,421
Tobacco	(millions of lbs.)	22	26	27	27	29	26	22	30
Coir	(tons.)	36	23	32	32	26	26	27	31
Mica	(cwts.)	49	50	60	115	74	53	40	66
Fruits & Vegetables	(tons,)	11	10	10	12	9	10	10	13
Fish (excluding Canned Fish	(cwts.)	249	239	233	302	278	251	221	236
Oils	(in millions of gallons)	17	32	27	2	1·3	2·1	2·6	3·1
Coal & Coke	(tons)	825	526	434	688	430	517	454	376
Hemp—Raw	(cwts.)	509	561	455	435	293	224	281	388
Ghee	(cwts.)	47	46	41	36	31	27	22	24
Animals—Living	(thousand No.)	451	274	238	488	318	184	88	133
Silk raw	(lbs.)	1,711	1,617	1,325	1,341	651	535	119	449
Fibre for Brushes & Brooms	(tons)	...	1	5	9	6	6	7	7
Bristles	(cwts.)	94	4	3	3	2·5	3	3	4
Cordage & Rope	(cwts.)	53	56	55	57	46	46	46	42
Candles	(lbs.)	6,069	8,014	9,692	3,884	2,287	1,435	1,682	1,885
Saltpetre	(cwts.)	305	440	273	85	83	134	159	188
Tallow, Stearine & Wax	(cwts.)	17	13	29	24	24	11	17	8
Horns, Tips, etc.	(cwts.)	88	30	70	37	21	18	38	42
Sugar	(tons)	11	8	18	1	1	1	1	1·6

Table showing the value of the principal articles Exported from British India

(In Lakhs of Rupees)

Name of Article	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Cotton, Raw and Waste	38,28	33,63	65,47	65,60	46,73	23,78	20,70	26,98
,, Manufactures	11.40	11,73	17.22	7,19	5,22	4.82	3,29	2,73
Jute Manufactures	20,25	40,20	43.15	51.93	31,89	21,92	21,71	21,37
,, Raw	22,20	12,89	19.53	27,17	12,88	11.19	9,73	10,98
Tea	13.07	17,55	20.92	26,01	23.56	19,44	17,15	19,85
Grain, Pulses and Flour	45.81	37,42	32.83	34,79	29,88	20,37	16,08	11,75
Seeds	24,37	12.17	23,54	26,47	17,86	14.59	11,31	13,66
Leather	4,30	7.19	6.24	8.16	6.39	5,35	4,76	5,83
Metals and Ores — Manganese Ore	99	89	1,45	2.29	1,39	57	48	51
Metals and Ores — Other metals and Ores	70	1.83	2.74	8,05	6,55	4,90	4,19	4,98
Hides and Skins (raw)	10,32	9,88	9,45	7.98	5,47	8,66	2,77	4,25
Paraffin Wax	55	98	1,19	3,18	2,82	2.32	2,02	2,29
Oil-Cakes	1,06	95	1,61	3.12	2,08	2.01	1,97	1,65
Wool—Raw and Manufactures	2.94	4.11	4,09	5.34	3.23	3,37	1,91	2,72
Lac	2,20	2,57	8,42	6.97	3,14	1.84	1,24	2,46
Coffee	1,38	1,18	1,47	1.45	1,92	95	1,10	1,02
Tobacco	37	56	85	1,06	1,04	85	77	94
Dyeing and Tanning substances	1,15	2,41	1.52	1,12	1,08	87	75	79
Spices	86	1,03	1,12	1,96	1,27	87	72	72

Table showing the value of the principal articles Exported from British India—(*contd.*)

(In Lakhs of Rupees)

Name of Articles	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Fodder, Bran and Pollards	90	42	1,20	1,19	77	75	70	47
Fruits and Vegetables	47	57	64	91	80	90	70	99
Coir	80	54	1,02	1,05	89	76	60	77
Wood and Timber	1,00	71	1,12	1,85	1.40	78	56	84
Oils	92	1,87	3,78	72	47	57	54	57
Fish (excluding canned fish)	39	43	57	74	68	54	46	45
Coal and Coke	76	48	57	72	49	55	44	38
Provisions and Oilman's stores	46	60	66	60	50	40	33	28
Mica	36	57	80	1,03	68	39	32	45
Hemp—Raw	78	1,18	90	68	39	27	32	36
Drugs and Medicines	19	30	36	48	21	23	31	24
Fibre for Brushes, etc.	...	15	21	28	26	20	24	22
Bristles	16	14	15	14	11	12	14	17
Saltpetre	35	80	46	9	8	11	12	15
Opium	9.96	2,17	2,33	1,42	1,22	87	11	78
Animals—Living	28	22	30	37	26	15	10	10
Apparel	15	11	21	25	16	10	9	11
Rubber—Raw	39	1,58	1,18	1,79	1,30	45	9	31
Building and Engineering materials other than Iron, Steel or Wood	...	...	...	15	10	7	9	10
Cordage and Rope	8	11	13	14	10	9	8	7
Tallow, Stearine and Wax	9	8	12	8	7	4	5	3
Candles	17	23	20	11	6	4	5	5
Silk—Raw and manufactures	50	45	42	32	10	3	3	3
Sugar	16	22	56	4	3	2	2	2
Horns, Tips, etc.	21	7	12	8	4	1	2	3
All other articles	2,77	2,89	5,61	4,54	3,72	3,78	3,24	3,70
*Total Exports	2,19.50	2,15,97	2,86,33	3,10,81	2,20,49	1,55,89	1,32,41	1,46,32

Exports of Jute Raw

(*Quantity in Thousands of Bales.*) (*Value in Lakhs of Rupees*)

Country to which Exported	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	1,691	1,295	952	923	604	865	725	993	8,97	5,56	2,23	3,11	2,24	2,56
Other parts of the Br. Empire ...	4	8	5	13	7	6	8	24	2	2	1	2	3	6
United States of America ...	535	523	483	445	297	274	201	290	2,33	2,52	1,04	91	69	75
France	428	198	357	596	500	291	386	469	2,25	3,62	1,85	98	1,16	1,25
Italy	213	215	180	307	236	246	210	364	1,15	1,90	92	86	66	96
Brazil	15	66	79	103	85	90	74	107	...	68	38	31	26	33
Japan	17	30	60	90	34	56	31	97	11	44	12	17	23	24
Belgium	...	1	174	259	268	257	192	287	14	1,54	99	76	59	76
Spain	122	172	132	250	185	199	237	200	65	1,54	69	69	72	51
Germany	920	34	586	1,212	946	733	735	980	4,90	7,41	3,50	2,56	2,29	2,56
Austria ... ... } Hungary	250	13	2	...	...	...	...	...	...	...	...	...	...	...
Hungary				...	...	...	...	...	...	...	...	...	...	...
Other Countries	86	44	92	321	308	270	304	379	1,68	1,94	1,15	75	86	95
Total British Empire ...	1,695	1,303	957	936	611	871	733	1,017	8,99	5,58	2,24	3,13	2,27	2,62
Total Foreign Countries ...	2,589	1,296	2,145	3,583	2,859	2,416	2,420	3,173	13,21	21,59	10,64	7,99	7,46	8,31
Grand Total ...	4,281	2,599	3,102	4,519	3,470	3,287	3,153	4,190	22,20	27,15	12,88	11,12	9,73	10,98
Percentage of Br. Empire ...	39·6	50·1	30·9	20·7	17·6	26·5	23·2	24·2	40·5	20·5	17·4	28·1	23·3	23·9

Exports of Jute Manufactures.

(*Quantity in Lakhs of Yds.*) GUNNY CLOTH (*Value in Lakhs of Rupees.*)

Name of Countries to which Exported	Qty: Pre-War Average 1909-10 to 1913-14	Qty: War Average 1914-15 to 1918-19	Qty: Post-War Average 1919-20 to 1923-24	Qty: 1929-30	Qty: 1930-31	Qty: 1931-32	Qty: 1932-33	Qty: 1933-34	Value: Pre-War Average 1909-10 to 1913-14	Value: 1929-30	Value: 1930-31	Value: 1931-32	Value: 1932-33	Value: 1933-34
United Kingdom ...	423	1,333	741	586	402	622	575	516	56	1,15	59	70	63	57
Ceylon	...	...	...	33	30	29	23	26	...	7	3	4	3	3
Union of South Africa	...	..	...	53	57	44	45	64	2	12	10	7	7	9
Canada	333	534	508	816	731	633	655	801	40	143	91	65	65	88
Australia & New Zealand	209	253	175	299	227	228	277	243	...	74	38	32	40	35
China	...	...	...	104	50	58	42	15	...	21	8	7	5	2
Philippine Island&Guam	...	...	...	146	158	162	209	178	...	33	28	25	33	28
Egypt	...	...	...	56	38	69	66	113	1	12	5	9	8	13
United States of America	6,639	6,985	8,938	10,719	8,538	6,924	5,488	6,477	692	1,825	1,062	657	510	660
Uruguay	..	...	...	146	141	104	96	102	...	29	22	11	10	12
Argentine Republic ...	1,727	1,440	1,813	3,293	2,086	1,049	2,375	1,696	209	649	316	119	247	193
Peru	...	...	...	25	15	17	22	30	...	4	1	2	2	36
Other Countries ...	369	1,016	528	229	249	272	244	270	76	44	38	38	30	35
Total British Empire	..	...	...	1,789	1,447	1,556	1,530	1,665	...	351	201	178	178	1,95
,, Foreign Countries	...	...	...	14,716	11,263	8,655	8,537	8,866	...	2,619	1,486	867	846	6,44
GRAND TOTAL ...	9,700	11,561	12,703	16,505	12,710	10,211	10,117	10,531	10,76	29,70	16,86	10,45	10,24	11,39
Percentage of British Empire	...	...	...	10·8	11·4	15·2	15·6	15·8	...	...	...	...	...	...
Declared value per yard	..	...	...	...	...	...	.	...	0-1-9	0-2-11	0-2-1	0-1-8	0-1-7	0-1-9

Exports of Jute Manufactures—(*Contd.*)

Jute Bags.

Countries to which Exported	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average 1909-10 to 1913-14	1929-30	1930-31	1931-32	1932-33	1933-34
	(Quantity in Lakhs of Bags).								*(Value in Lakhs of Rupees).*					
United Kingdom	305	2,265	418	5,30	401	475	465	451	79	201	121	114	107	98
Germany				26	18	17	30	16	15	10	7	5	9	4
Netherlands				16	28	14	15	16	...	6	8	3	3	4
Europe excepting United Kingdom ... (Germany, Netherlands, Belgium, France)	206	688	299											
Belgium				125	120	67	67	91	...	38	29	15	15	20
France				21	11	7	7	7	...	7	3	2	2	2
Portuguese East Africa [E. Africa incl. Mauritius] ...	99	90	112	136	124	124	119	117	14	51	37	33	28	25
Union of South Africa [S. Africa incl. Rhodesia] ...	119	243	177	2,08	2.00	182	181	154	39	98	80	62	57	46
Straits Settlements (incl. Labuan).				139	115	156	148	141	...	63	41	47	39	35
Siam ...				105	40	62	118	128	27	44	14	19	31	31
Far East excepting Java and Japan. (Straits Settlements, Siam, Indo-China, Hawaii, China)	393	436	584											
Indo-China ...				120	53	47	86	74	...	51	17	13	22	17
Hawaii ...				180	169	207	181	171	19	40	34	29	24	23
China ...				433	199	284	254	6	...	181	61	79	65	1
Japan	35	118	186	157	54	46	94	62	...	64	17	12	24	14
Java	130	206	205	373	416	296	136	128	45	168	159	96	41	34
Egypt	119	385	102	190	170	143	128	175	48	89	66	46	35	52
United States of America.				170	106	84	128	76	92	51	25	14	25	11
Central America and West Indies (United States of America, Cuba and West Indies)	130	229	298											
Cuba and West Indies.				421	351	267	231	237	44	221	140	88	76	66
Chile and Argentine [South America]	431	532	335	358	202	52	78	211	85	132	50	15	22	40
Australia and New Zealand ...	628	737	720	843	999	742	1,049	876	...	411	370	236	320	242
Other countries	796	747	607	672	564	613	636	874	432	263	183	166	171	207
TOTAL BRITISH EMPIRE ...	...	...	..	1,804	1,795	1,612	1,990	1,918	...	806	637	474	543	340
TOTAL FOREIGN COUNTRIES ...	...	...	...	3,419	2,545	2,273	2,161	2,094	...	1,383	825	620	573	632
GRAND TOTAL ...	3,391	6,676	4,043	5,223	4,340	3,885	4,151	4,012	939	21,89	14,62	10,94	11,16	972
Percentage of British Empire in total	...	...	...	34·5	41·4	41·5	46·3	47·8	..	36·8	43·6	43·3	48·7	34·9
Declared value per bag	...	...	...	...	...	...	...	...	0-4-5	0-6-9	0-5-5	0-4-6	0-4-4	0-3-8

Exports of Cotton—Raw.

(Quantity in Thousands of Bales of 400 lbs.) *(Value in Lakhs of Rupees.)*

Country to which Exported	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	122	212	152	270	281	168	168	342	172	4,31	3,00	1,54	161	3,37
Other parts of British Empire	30	21	13	7	6	3	2	...	41	9	11	5	3	...
Japan ...	1,012	1,373	1,540	1.640	1,686	1,080	1,085	1,024	14,51	27,30	20,99	11.05	11,12	10,53
Italy ...	233	249	263	393	362	184	151	260	3,18	5,79	3,77	1,62	1,44	2,39
France ...	109	69	91	253	232	81	123	162	1,51	3,92	2,59	79	1,17	1,53
China (exclusive of Hongkong, etc.) ...	31	48	289	566	606	436	134	336	43	9,34	7,41	4,52	1,33	3,22
Belgium ...	277	44	217	341	217	121	128	146	3,68	5,63	2,64	1,18	13,0	1,43
Spain ...	50	41	61	80	106	45	50	62	73	1,22	1,16	42	49	63
Germany ...	351	69	198	344	309	166	151	246	4,45	4.89	3,29	148	1,33	2,09
Other Countries	192	64	93	176	121	85	71	162	266	2,59	1,37	80	55	1,40
Total British Empire ...	152	233	165	277	287	171	170	342	213	4,40	3,11	1,59	1,64	3,37
Total Foreign Countries ...	2,255	1,957	2,752	3,793	3.639	2,198	1,893	2,398	31,15	60,68	43,22	21,86	18,73	23,22
GRAND TOTAL	2,407	2,190	2,917	4,070	3,926	2,369	2.063	2,740	33,28	65,08	46,33	23,45	20,37	26.59
Percentage of British Empire	6·3	10·6	5·7	6·8	7·3	7·2	8·2	12·5	...	...	...	...	...	...
Declared value in total per cwt. Rs. ...	...	...	...	.	. .	...	...	...	38-11-3	44-12-3	33-0-8	27-5-2	27-12-10	27-2-7

Exports of Tea.

Name of Countries	(Quantity in Millions of lbs.) Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	(Value in Lakhs of Rupees). Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	194	252	280	317	299	291	331	277	9,51	22,19	19,95	16,90	14,79	17,59
Canada ...	10	10	10	12	10	14	17	15	55	74	62	67	80	77
Australia ...	9	8	6	5	5	3	2	2	41	31	29	13	8	11
Ceylon ...	4	3	3	4	5	3	4	3	27	27	37	20	23	20
Egypt ...	1	2	2	6	4	3	2	1	...	37	22	15	8	7
Iraq ...	...	...	12	2	1	1	...	·5	...	10	7	5	2	3
Russia ...	30	18	...	5	6	3	3	·7	1,42	27	35	16	14	4
United States of America ...	2	6	6	8	10	10	11	8	12	59	64	50	57	46
China ..	8	6	...	...	2	1	...	...	36	...	13	6	...	...
Persia ...	...	4	2	6	4	2	1	1	2	32	24	10	7	6
Georgia ...	...	...	...	2	2	2	1	...	...	16	15	9	3	...
Arabia ...	...	...	...	1	1	1	2	·5	1	9	7	5	5	3
New Zealand ...	...	...	...	...	...	1	1	2·5	...	2	2	5	6	13
Other Countries	8	14	10	11	7	6	4	6·8	40	55	39	27	23	36
Total British Empire ...	221	280	306	343	323	312	355	299·5	10,74	23,61	21,31	17,98	15,99	18,80
Total Foreign Countries ...	45	43	15	33	33	29	24	18·5	233	2,40	2,25	1,43	1,16	1,05
GRAND TOTAL ...	266	323	321	377	356	341	379	318	13,07	26,01	23,56	19,41	17,15	19,85
Percentage of British Empire to total ...	83·1	86·7	95·3	91	90·7	91·5	93·7	94·3	82·2	90·8	94·3	92·6	93·2	94·6
Declared value per lb. ...	...	...	...	...	...	...	..	...	0-7-1	0-11-1	0-10-7	0-9-1	0-7-3	0-9-11

Exports of Oil seeds.

GROUNDNUT.

(*Quantity in hundreds of tons*). (*Value in Lakhs of Rupees*).

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
France ..	169,1	87,5	126,8	210,9	172,2	223,2	219,4	148,9	2,82	4,85	2,87	3,53	3,68	1,87
United Kingdom	1,9	8,3	13.3	53,2	47,2	77,9	31,6	25,2	3	1,24	72	1,15	58	31
Belgium ...	15,3	6	14,0	8,1	2,2	4,5	8,6	10,1	27	18	4	7	14	11
Italy... ...	7	2,9	14.6	54,7	77,0	80,3	28,2	67,4	2	1,23	1,13	1,29	44	79
Germany ...	7,4	8	12,2	210,1	119,8	121,8	48,1	72,3	12	4,80	2,01	1,76	76	88
Netherlands ...	1	..	7,3	154,2	167,3	147,2	87,4	59,5	...	3,51	2,67	2,11	1,38	73
Other Countries	17,3	18.6	7,0	22,9	15,5	17.1	9,7	163,1	27	57	23	24	15	1,94
TOTAL ...	211,8	118,7	195,2	714,1	601,2	672,0	433,0	546,5	3,53	16,39	9,67	10,14	7,12	6,63
Percentage of United Kingdom to total ...	0·9	6·9	6·8	7·5	7·9	11·6	6·9	4·6	0·85	7·6	7·4	11·3	7·7	4·6
Declared value per cwt. Rs. ...	...	...	...	...	...	...	...	...	8-5-1	11-7-7	8-0-8	7-8-7	8-3-7	6-1-1

LINSEED.

(*Quantity in hundreds of tons*). (*Value in Lakhs of Rupees*).

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	130,5	203,5	141,9	79,5	57,6	14,1	14,3	158,3	2,65	1,81	1,24	16	16	1,81
France ...	76,8	25,3	42,9	50,7	25,0	44,2	21,6	41,5	1,56	1,14	53	55	25	50
Italy ...	26,6	16,6	16,1	28,4	32,7	14,6	10,6	21,7	55	66	73	24	18	31
Belgium ...	67,8	4,9	23,1	12,8	13,2	8	3	10,2	1,56	33	29	1	·4	13
Germany ...	33,5	2,0	3,2	10,5	10,6	9,8	9,5	10,3	70	24	23	14	13	13
Australia ...	1,6	11,1	11,4	22,8	11,0	10,0	9,4	12,0	3	52	22	12	10	14
Other countries	42,2	7,0	12,9	43,5	106,5	26,8	8.8	124,9	94	1,02	2,17	31	9·6	1,56
TOTAL...	379,0	270,4	251,5	248,2	256,6	120,3	72,2	378,9	7,99	5,72	5,41	1,53	91	4,58
Total for Br. Empire ...	132,1	214,6	153,3	102,3	68,6	24,1	23,7	...	2,68	2,33	1,46	1,28	26	1,95
Percentage of Br. Empire to total	34·9	79·4	61·0	41·2	26·7	20·0	32·8	41·7	33·5	40·7	27·0	8·3	28·0	42·5
Declared value per cwt. Rs. ...	...	...	...	...	..	...	...	...	10-8-8	10-8-6	10-8-7	6-5-9	6-4-10	6-1-0

Exports of Oil Seeds—(*Contd.*)

CASTOR SEEDS

(*Quantity in Hundreds of Tons*). (*Value in Lakhs of Rupees*).

Name of Country	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	53,9	47,1	10,5	24,7	19,6	23,2	22,7	15,9	78	50	33	34	33	19
United States of America ...	11,8	14,7	18,8	51,0	38,5	34,7	28,4	21,2	18	1,01	65	48	42	27
Belgium ...	13,7	1,1	4,1	3,5	5,1	4,1	4,1	3	20	7	8	6	6	·4
France ..	15,7	14,8	8,8	16,5	16,0	20,3	16,8	12,0	23	34	29	31	24	15
Italy ...	11,0	7,1	4,3	6,1	6,5	12,1	6,2	7,9	16	13	12	13	9	10
Other Countries	7,5	4,0	1,8	4,6	5,3	9,5	11,9	24,3	11	9	9	13	17	28,6
TOTAL ...	113,6	88,8	48,3	106,4	91,0	104,0	85,9	81,6	1,66	2,14	1,56	1,50	1,24	1,00
Percentage of United Kingdom to total ...	47·4	53·0	21·7	23·2	21·5	22·3	25·0	19·5	47·0	23·4	21·2	22·6	25·8	19·0
Declared value per cwt. ...	...	...	...	...	...	...	...	...	7-5-2	10-1-7	8-9-0	7-3-5	7-3-3	6-1-7

RAPE-SEED

Name of Country	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	25,3	50,5	46,7	7,8	10,6	14,4	10,7	16,7	35	16	15	19	14	18
France ...	63,5	19,6	17,0	9,8	10,6	5,6	8,3	11,1	96	20	17	7	10	13
Italy ...	7,1	6,0	26,0	7	1,7	18,0	68,2	9,7	11	1	3	26	91	11
Belgium ...	98,6	5,4	56,5	2,7	1,8	1,3	2,8	4,5	1,52	6	3	2	3	5
Germany .	68,2	1,6	38,4	6,3	2,3	4,0	0,1	9,6	1,05	13	4	5	12	11
Other Countries	10,0	7,6	21,2	17,0	5,8	10,6	15,4	21,9	16	36	10	14	23	23
TOTAL ...	272,7	90,7	205,8	44,3	32,8	53,9	114,5	73,5	4,15	92	52	73	1,54	81
Percentage of United Kingdom to total ...	9·3	55·7	22·7	17·6	32·3	26·7	9·3	22·7	8·4	17·4	28·8	26·0	9·1	22·2
Declared value per cwt. Rs. ...	...	...	...	...	...	...	...	...	7-9-8	10-6-3	7-15-1	6-12-4	6-11-7	5-8-3

Exports of Rice not in Husk

(*Quantity in Thousands of Tons*) (*Value in Lakhs of Rupees*)

Name of Countries	Qty. Pre-War Average 1909-10 to 1913-14	Qty. War Average 1914-15 to 1918-19	Qty. Post-War Average 1919-20 to 1923-24	Qty. 1929-30	Qty. 1930-31	Qty. 1931-32	Qty. 1932-33	Qty. 1933-34	Value Pre-War Average 1909-10 to 1913-14	Value 1929-30	Value 1930-31	Value 1931-32	Value 1932-33	Value 1933-34
United Kingdom	159	325	96	40	58	51	75	116	157	50	62	40	54	64
Ceylon	325	328	311	426	444	410	394	403	427	644	562	367	340	270
Straits Settlements	308	261	170	229	265	233	156	166	324	300	279	167	110	95
Union of South Africa	...	..	...	25	29	27	25	25	32	45	42	30	26	21
Kenya Colony, Zanzibar Pembra ...	..	...	...	22	18	17	13	16	33	36	25	17	12	15
Australia & New Zealand ...	...	...	...	6	2	5	5	6	21	8	3	5	4	3
Belgium	...	..	...	30	46	49	29	38	42	43	44	28	16	14
Germany	345	23	207	271	162	262	228	227	341	331	153	178	155	128
Netherlands	240	24	31	125	100	158	96	57	216	154	96	109	61	32
China	13	6	68	260	467	354	234	172	...	317	548	265	180	93
Japan & Korea	123	52	52	27	5	...	74	...	134	35	6	..	62	...
Sumatra	10	33	33	134	129	96	62	70	11	176	144	64	43	41
Java	168	82	75	155	51	63	18	4	177	194	47	43	11	2
Bahrein Islands	...	...	...	22	16	16	17	13	25	47	28	23	21	13
Egypt	54	17	36	45	22	86	36	45	54	58	22	58	25	23
Mauritius & Dependencies ...	56	50	50	62	50	51	52	52	74	100	65	54	46	37
Cuba	...	...	...	88	92	70	39	46	...	122	107	52	30	28
West Indies	...	...	...	30	16	21	17	22	19	40	30	18	14	14
United States of America ...	...	...	...	2	3	1	1	1	...	2	3	1	1	1
Arabia	25	38	47	57	50	42	44	44	...	99	72	50	48	86
Other Countries	572	446	289	242	229	289	357	210	480	327	244	175	180	1,22
Total British Empire	1,044	1,094	835	820	884	810	721	790	10,80	12.10	10,66	7,57	5,92	5,04
,, Foreign Countries ...	1,354	591	627	1,478	1,370	1,491	967	943	15,61	19,18	15,16	10,27	8,81	5,48
GRAND TOTAL ...	2,398	1,685	1,462	2,298	2,254	2,301	1,828	1,733	25,67	31,28	25,82	17,84	14,23	10,52
Percentage of Br. Empire ...	43.5	65.0	57.1	35.7	39.2	35.2	40.0	45.4	...	...	...	...	...	...
Declared value per cwt. ...	...	...	...	...	...	...	...	...	5-5-8	6-12-11	5-11-8	3-14-2	3-14-8	3-0-2

Exports of Wheat

(*Quantity in Thousands of Tons*) (*Value in Lakhs of Rupees*)

Name of Countries to which Exported	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average 1909-10 to 1913-14	1929-30	1930-31	1931 32	1932-33	1933-34
United Kingdom ...	985	340	162	7	175	17	...	...	10'51	10	1,71	10	...	...
France	106	84	18	...	5	...	...	...	113	...	5	...	...	...
Italy	34	62	11	..	...	..	...	...	37	...	...	...	...	...
Belgium	138	6	16	..	6	...	...	...	146	..	7	...	...	...
Germany	16	...	8	...	...	..	...	...	...	...	..	...	...	.
Egypt	4	268	9	...	..	...	...	...	4	...	...	...	...	...
Arabia	...	...	...	2	2	2	0'6	0'6	...	4	3	2	1	0'6
Other Countries ...	25	47	13	4	8	2	1'6	1'5	46	7	9	3	3	2'7
Total British Empire ...	992	630	173	7	175	17	...	...	10,60	10	171	10	...	...
,, Foreign Countries	316	177	64	6	21	4	2'2	2'1	3,37	11	24	5	4	3'3
GRAND TOTAL ...	1,308	807	237	13	196	21	2'2	2'1	13,97	21	195	15	4	3'3
Percentage of British Empire ...	75'8	78'1	73'0	53'8	89'3	81'0	...	...	...	...	...	...	...	..
Declared Value per cwt ...	...	...	...	...	...	...	...	...	5-5-5	8-3-0	4-15-4	6-4-2	8-11-4	7-14-5

Exports of Hides and Skins.

Raw Hides

(Value in Lakhs of Rupees)

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	31	1,09	60	6	7	4	4	12
United States of America	69	1,65	86	9	1	...	...	1
Italy	84	1,45	52	45	32	15	13	18
Spain	47	21	26	30	15	8	4	4
France	8	9	5	1	...	...	...	...
Belgium	7	1	4	3	1	...	...	...
Germany	2,43	25	75	1,12	63	32	19	34
Netherlands	17	1	4	12	11	4	4	6
Other Countries	1,52	28	30	52	48	30	23	26
Total British Empire ...	34	1,16	68	7	7	4	4	12
Total Foreign Countries ...	6,23	5,88	2,74	2,63	1,71	87	59	89
Grand Total	6,57	5,05	3,42	2,70	1,78	91	63	1,01
Percentage of British Empire in total	5·2	22·9	19·9	2·6	3·9	4·4	3·3	12
Declared Value per cwt.	66-4-1	...	...	53-8-4	38-14-8	26-11-8	23-6-9	25-0-0

Raw Skins

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	26	39	50	31	32	47	54	84
United States of America	2,80	3,93	4,80	3,85	2,58	1,77	91	159
France	25	22	28	39	21	16	21	18
Other Countries	42	28	43	64	52	21	54	62
Total British Empire ...	32	57	69	52	47	50	61	91
Total Foreign Countries ...	3,41	4,25	5,33	4,67	3,16	2,24	1,53	2,32
Grand Total	3,73	4,82	6,02	5,19	3,63	2,74	2,14	3,23
Percentage of British Empire in total	8·6	11·8	11·3	10·0	12·9	19·3	28·5	28·1
Declared Value per cwt.	68-0-6	...	...	117-10-6	99-1-0	80-11-7	76-13-5	81-2-11

Exports of Hides & Skins Tanned and Dressed.

Dressed and Tanned Hides.

(Value in Lakhs of Rupees)

Name of Country to which Exported		Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	...	1,52	4,38	2,91	3.10	2,51	2,08	1,60	2,38
Other Countries	...	4	2	29	34	8	5		3
Total British Empire	...	1,53	4,39	3,03	3.16	2.54	2,09	1,61	2,38
Total Foreign Countries	...	4	1	16	28	6	4	1	3
Grand Total	...	1,57	4,40	3.19	3,44	3.60	2,13	1,62	2,41
Percentage of British Empire in total ...	...	97·5	99 8	95	91·8	97·7	98·1	99·4	99·0
Declared Value per cwt.	...	87-10-10	...	...	120-7-11	112-8-4	...	...	91-1-1

Dressed and Tanned Skins.

Name of Country to which Exported		Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	...	2,15	1,99	2,14	3,87	3,23	2,77	2,77	2,92
United States of America	...	29	59	25	30	6	3	...	4
Japan	...	13	12	36	32	29	26	21	21
Other Countries ...	...	13	6	18	12	10	8	6	7
Total British Empire	...	2,21	2,02	2,26	3,94	3,28	2,81	2,81	2,95
Total Foreign Countries	...	50	73	67	68	40	33	23	29
Grand Total	...	2,71	2,75	2,93	4,62	3,68	3.14	3,04	3,24
Percentage of British Empire in total ...	...	81·5	74·5	79·5	85·3	89·1	89·5	92·1	91·5
Declared Value per cwt.	...	196-12-3	...	...	342-12-8	296-14-9	..	...	246-8-10

Exports of Manganese Ore.

(Quantity in Thousands of Tons) — (Value in Thousanas of Rupees)

Name of Countrie	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	1,93	3,36	2,15	2,92	1,14	54	55	117	30,66	86,65	34,23	16,06	14.16	25.40
Germany	7	3	5	22	15	2	1	3	...	7,01	4,61	41	25	60
Netherlands	19	...	15	34	11	3	2	3	...	2,40	4,60	89	50	55
Belgium	1,50	15	1,94	1,78	73	35	32	14	25,84	48,24	23,98	10,65	9,50	2,49
France	97	47	1,98	2,08	1,88	80	75	61	17,24	53.53	49,46	17,57	16,83	10,60
Italy	3	12	12	4	1	...	...	...	...	1,50	...	...	...	...
Japan	1	12	2	15	6	...	31	62	...	...	...	...	6,65	10,77
United States of America	1,32	48	66	51	49	28	...	...	18,75	15,45	14,11	8,44	...	...
Other Countries	2	1	1	12	24	10	2	6	6,15	13.75	8.41	220	35	...
TOTAL	6,07	4,71	6,48	8,16	4,86	2,12	1,98	266	98,64	2,28,56	1,39.10	56,52	48,24	51,34
Percentage of U.K. to total	1·8	70·9	37·8	35·8	23·5	25·5	27·8	44·0	31·3	38·0	21·6	28·3	29·4	50·0
Declared value per ton	...	...	...	...	...	...	...	...	16-4-0	28-0-4	28-10-2	27-0-7	23-12-0	19-4-10

Exports of Shellac.

(Quantity in Thousands of Cwts.) — (Value in Lakhs of Rupees.)

Name of Countrie	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	79	65	66	120	96	83	81	209	...	1.31	54	35	25	1,23
United States of America	164	191	233	226	117	101	66	94	...	2,61	78	44	22	31
Germany	61	4	11	65	64	34	34	40	...	79	39	15	10	11
France	18	9	9	12	11	10	11	12	...	13	7	9	3	4
Japan	4	12	10	27	28	34	27	51	...	33	18	15	8	10
Australia	2	2	2	6	4	2	4	3	...	7	3	1	2	1
Belgium	..	...	...	5	4	5	4	3	...	6	2	2	1	1
Italy	...	...	...	6	6	5	5	6	..	7	4	2	2	2
Other Countries	28	18	15	31	36	23	30	31	...	36	24	12	10	11
TOTAL	356	301	356	498	366	297	262	529	..	5,68	2,29	1,30	83	194
Percentage of B. Empire to total	22·8	22·3	21·9	25·9	27·3	28·6	32·4	59·0	...	24·3	24·9	27·7	32-5	64·0
Declared value per cwt.	..	..	..	...	...	...	...	..	54-1-9	113-15-10	62-6-5	43-1-6	31-9-3	36-11-6

Exports of Pig Lead

(Value in Lakhs of rupees)

Name of Countries	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom		154·5	165·7	104·2	117·6	127·7
Germany		34·0	8·2	6·9	...	...
Belgium		20·6	4·3	4·6	...	...
Ceylon		11·1	8·9	5·9	4·0	3·6
China		2·9	3·4	3·8	3·2	·9
Japan		17·4	18·7	38·7	20·9	17·1
Other Countries		4.0	7·7	9·2	1·9	2·4
Total British Empire (United Kingdom & Ceylon)		1,65·6	1,74·6	110·1	120·6	132·7
,, Other Countries		78·9	42·3	63·2	26·0	19·0
TOTAL		2,44·5	2,16·9	1,73·3	147·6	151·7
Percentage of U. K. & Ceylon in total . ..		67·7	80·5	63·5	82·3	87·5

Exports of Wolfram Ore

(Value in Lakhs of Rupees)

United Kingdom	19·6	52·5	56·2	50·2	60·9
Germany	5·2	3·8	3·8	0·7	1·7
Other Countries	3·2	1·7	2·4	0·5	1·8
TOTAL	28·0	58·0	62·3	51·4	64·4
Percentage of United Kingdom	70	90·6	90·5	97·7	94·5

Exports of Coal

(Value in Lakhs of Rupees

Name of Countries	Pre War Average 1909-10 to 1913 14	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...		2	1	1	3·6	3·1
Ceylon	43	11	35	33	29	26·1
Straits Settlements ...	17	7	3	2·5	1·9	·5
Hongkong ...		13	5	14·1	13·8	6·5
Philippine Islands & Guaw		5	3	3·2	0·7	·4
Other Countries ...		4	1	0·7	3·8	·7
Total British Empire	60	63	45	56·6	39·3	36·2
,, Foreign Countries	16	9	4	3·9	4·5	1·1
GRAND TOTAL		72	49	54·5	43·8	37·3
Percentage of British Empire in total ...	78·9	87·5	91·8	92·8	89·7	97·0

g Iron

United Kingdom	33·2	38·5	21·1	26·1	21·6
Germany	6·7	4·3	4·6	2·7	1·8
China	6·1	7·7	5·3	5·9	4·4
Japan	158·6	64·1	65·8	24·2	4·0
United States of America ...	38·8	40·8	17·9	10·9	13·8
Other Countries	16·0	15 0	5 0	4·6	3·2
TOTAL	259·4	170·4	122·7	74·4	85·0
Percentage of United Kingdom	12·8	22·6	19·6	35·1	26·2

Exports of Raw Wool

(In Lakhs of Rupees.)

	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ..	261	352	227	250	106	146
United States of America	4·5	78	14	22	9	33
Other Countries ..	2·5	12	10	5	8	20
TOTAL	268	442	251	277	123	199

Manufactures.

	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	19	38	38·2	40·6	44·6	56·5
Ceylon	...	2·0	1·4	1·7	1·9	1·9
United States of America ...	2·4	36	20·9	10·8	12·7	8·5
Australia	...	1·52	0·3	0·1	0·7	0·6
Other Countries	1·7	7·5	6	3·2	3·6	5·2
TOTAL ...	25·1	85·00	67·0	56·4	63·5	72·7
Other kinds of Woollen Manufactures	2·8	6·3	4·7	2·7	4·3	1·3
Total of Woollen Manufactures ...	25·9	91·3	71·7	59·1	67·8	74·0
Total of wool and Woollens ...	294·0	533·3	322·7	336·1	190·8	273
Declared value per lb. of Wool, Raw	0-7-10	0-14-1	0-13-2	0-11-2	0-6-8	0-5-8

Table showing the volume of principal articles imported into British India

(Figures in thousands unless stated otherwise)

Name of Articles		Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Cotton—Piecegoods (millions of yds.)	..	2,654	1,853	1,352	1,919	890	776	1,225	796
,, Twist and yarn (millions of lbs.)	...	42	34	45	44	29	31	45	32
,, Raw Tons	...	12	58	12	24	53	79	85	43
,, Waste Cwt.	...	3	2	...	..	...	...	...	...
Metals and Ores.—									
Iron and Steel { Protected Tons	...	808	422	661	712	421	273	237	244
Iron and Steel { Not Protected ,,					261	201	134	136	279
Copper ,,	..	593	90	260	147	205	204	325	28
Lead ,,	...	123	102	67	44	37	30	27	318
Zinc ,,	..	106	51	101	194	208	206	326	471
Brass ,,	...	20	113	444	432	380	343	571	39
Aluminium ,,	...	131	9	58	171	128	39	25	264
Sugar ,,	...	727	553	517	1,012	1,003	556	402	186
Oils:—									
Mineral (millions of gallons)	...	91	83	139	253	242	217	188	...
Other kinds (thousands of gallons)	...	1,197	862	415	2,375	1,985	3,930	9,267	...
Motor Cars No.	...	(a) 3	2	8	17	13	7	6	10
,, Cycles ,,	...	(a) 1	1	2	2	1·5	0·9	0·8	0·7
,, Omnibuses, etc, ,,	...	...	...	1	15	9	4	3	5
Provisions and Oilmans Stores Cwt.	..	578	488	501	1,257	1,237	945	901	849
Grain, Pulse and Flour Tons	...	15	34	136	384	277	156	77	124
Silk Raw lbs.	...	2,567	1,953	1,816	2,175	1,940	1,563	3,186	2,379
,, Waste ,,	...	92	78	105	...	11	4	8	...
,, Piecegoods including mixed goods (in millions of yds.)	...	32	23	20	26	21	25	45	51
,, Yarns, Noils, Warps, etc. lbs.	...	1,011	787	734	1,956	1,424	1,710	3,010	2,028
Wool—Raw ,,	...	3,202	3,678	2,086	6,653	3,073	6,691	7,186	5,099
Piecegoods (millions of yds.)	...	22	8	5	13	8	6	14	11·5
Shawls No.	...	1,668	198	80	658	392	164	338	332
Other Manufactures lbs.	...	4,032	1,713	1,459	7,264	5,185	4,150	6,557	7,245
Liquors gallons.	...	6,401	4,362	4,825	7,579	7,182	5,666	5,415	4,855
Paper and Pasteboard cwts.	..	...	...	1,229	2,740	2,294	2,191	2,640	2,564
Spices ,,	..	1,329	1,365	1,265	1,654	1,347	1,270	1,272	1,365

(a) Figures for 1913-14.

Table showing the volume of principal articles imported into British India—(*Contd.*)

(Figures in thousands unless stated otherwise)

Name of Articles			Pre War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Chemicals—										
Soda Compounds	cwts.	...	531	826	903	1,659	1,507	1,515	1,638	1,653
Tobacco	(in millions of lbs.)	...	3	4	6	10	5	4·5	6	5
Glass—Bottles and Phials	gross	...	166	345	332	703	616	461	810	786
Glass Beads and false Pearls	cwt.	...	29	18	22	37	19	15·5	23	22
,, Sheet & Plates	(millions of sq. ft.)	...	16	8	15·5	22	20	16	19	19·5
Dyes from Cotton	(in millions of lbs.)	...	15	3	12	19	18	13	13	14
Camphor	lbs.	...	1,417	1,632	707	1,833	1,770	1,933	1,753	1,786
Quinine Salts		...	119	76	81	129	107	111	103	128
Fruits—Dried, Salted. etc.	tons	...	53	53	63	70	69	71	61	57
Soap	cwt.	...	314	312	289	448	382	310	296	303
Paints and Colours	,,	...	296	255	299	493	453	334	340	370
Cement	tons.	...	30	95	119	121	112	83	83	66
Bricks and Tiles	(millions) No.	...	18	17	20	22	12	11	11	14
Salt		..	515	444	511	644	704	451	544	349
Teak wood	C. tons.	...	92	70	26	11	11	12	7	12
Boots and Shoes	(millions of pairs)	...	2·3	1·2	0·6	6·8	10·9	9·5	7·9	7·3
Books, Printed, etc.	cwt.	..	31	28	23	40	34	31	27	30
Tea	(millions of lbs.)	...	4·8	7·4	7·7	10·2	6·6	7	5·8	4·7
Coal and Coke	tons	...	455	133	630	237	179	68	47	72
Paper-making materials	cwt.	...	171	135	165	486	454	443	318	406
Gums and Resins	cwt.	...	150	87	163	213	181	140	146	187
Flax manufactures	(millions of yds.)	...	5·2	3·1	1·3	2·1	1·3	1·6	1·6	...
Animals—living	No.	...	14	12	5	9	8	12	5	6
Hides and Skins—raw	tons	...	1	1	1	2	1·6	1·8	1·8	2·2
Tallow and Stearine	cwt.	...	57	40	64	103	108	123	140	117
Fish (excluding Canned Fish)	cwt.	...	205	129	119	110	105	88	93	103
Matches	(millions of gross)	...	14·6	14·6	12·7	1·0	0·4	0·1	0·06	0·08
Oil-Cloth and Floor-Cloth	sq. yds.	...	1,414	1,121	634	1,340	861	733	944	855
Cordage and Rope	cwt.	..	23	25	15	26	22	20	15	18
Pitch and Tar	,,		200	219	103	46	45	63	117	155

Table showing the value of principal Imports into British India
(In Lakhs of Rupees)

Name of Articl	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-31	1932-33	1933-34
Cotton—Raw and Waste	1,03	45	2,01	3,42	6,39	7.03	7.26	3,55
,, Piecegoods	45,24	44,40	58,26	50,25	20,05	14,67	21.26	13,49
,, Other Manufactures	6,94	798	12,89	19.24	5,21	4,48	5.57	4,25
Machinery and Millwork	5,61	514	21,65	18,22	14,35	10,92	10,54	12,77
Metals and Ores-Iron and Steel	12,49	10,11	21,39	17,21	10,89	6,82	5,30	5,52
Copper	3,07	71	1,92	93	1,04	85	1,15	88
Other Metals	2.51	2,07	4,90	5,45	3,98	2,60	3,28	3,09
Ores	2	2	4	3	1	1	1	1
Oils—Mineral	3,72	4,02	8,03	11,04	10,48	9,04	6,70	5,89
Other Oils	23	22	25	65	44	68	1,30	92
Silk—Raw and Manufactures	395	3,93	5.74	4,58	3,00	2,74	4,33	3,59
Sugar (including Molasses)	12,93	14.56	19,71	15.78	10,96	6.17	4,23	2,71
Instruments, Apparatus and Appliances ...	1,36	1,06	3,92	5,38	4,77	3,69	3,85	4,02
Vehicles—Motor Cars	1,13*	75	3,12	3,76	2,58	1,48	1,29	1,77
,, Cycles	11*	6	19	11	8	4	4	3
,, Omnibuses	6	6	70	2,42	1,42	67	41	66
Other Vehicles	45	75	2.25	4,56	3,23	2,29	2,08	2,31
Hardware	3,17	2.79	5.79	5,07	3,60	2,61	2,99	2,88
Wool and Woollens	3,25	2.00	2.62	4,28	2,31	1,62	2,96	2,55
Provisions and Oilman's Stores	2,29	2,28	3,20	5.64	4,88	3,41	2,93	2,72
Paper and Pasteboard	1,27	2,02	3,50	3,72	2.87	2.50	2,86	2,63
Chemicals	90	1,92	2.05	2,79	2.61	2,57	2,71	2,70
Dyes	1.33	1,06	2,91	2,13	2,59	2,68	2,50	2,46
Liquors	2,02	2,37	3,72	3.77	3,32	2.27	2,26	2,27
Rubber	23	97	1.84	3,33	2,57	2,21	1,98	1,88
Drugs and Medicines	94	1,21	1,70	2,26	1,94	1,91	1,86	1,93
Spices	1,64	2,06	2,37	3,26	2,55	2,08	1,72	1,56
Glass and Glassware	1,62	1,28	2.53	2,52	1,65	1,22	1,42	1,22
Fruits and Vegetables	1,08	1,10	1,76	1,83	1,49	1,34	1,17	1,00
Tobacco	71	1,32	2,23	2,70	1,51	94	97	72
Paints and Painter's Materials	71	99	1,44	1,47	1,12	88	92	92
Apparel	147	143	1,70	1,71	1,11	82	84	82
Precious Stones and Pearls, unset	93	47	1,19	1,10	60	45	84	75
Soap	62	96	1,71	1,67	1,12	89	83	78
Salt	79	1,82	1,74	1,30	1,15	72	79	47
Building and Engineering Materials ...	78	99	1.67	1,34	1,10	84	77	64
Stationery	58	64	1,07	1,05	81	64	72	66

*Figures for 1913-14.

Table showing the value of principal Imports into British India—(*Contd.*)

(*In Lakhs of Rupees*).

Name of Article	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918-19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
Grain, Pulse and Flour ...	20	53	2,70	5,42	2,82	1,18	71	84
Haberashery and Millinery	1,37	1,02	1,31	1,04	73	54	68	55
Tonet Requisites	20	25	42	73	54	48	58	57
Belting for Machinery ...	40	60	34	90	63	50	53	46
Manures ...	5	5	10	99	67	36	53	52
Boots and Shoes	57	41	41	88	83	65	52	48
Wood and Timber	79	1,02	1,09	1,04	90	61	51	54
Earthenware and Porcelain	52	46	78	72	48	38	50	43
Tea Chests ...	44	80	72	80	64	50	48	53
Toys and Requisites for Games	40	30	52	65	49	37	47	53
Books, Printed, etc.	43	46	53	72	61	53	46	49
Arms, Ammunition and Military Stores	34	33	60	65	54	68	44	43
Tea	22	47	55	64	46	44	35	25
Jwellery, also plate of gold and silver	24	9	17	26	39	19	34	5
Bobbins ...	...	37	66	40	43	32	29	22
Umbrellas and Fittings	42	29	38	44	31	30	28	27
Tallow and Stearine ...	16	16	28	31	27	21	25	20
Cutlery ...	22	15	30	41	26	21	24	26
Gums and Resins ...	24	20	33	42	31	24	24	27
Paper-making Materials	11	18	31	45	42	36	22	27
Furniture and Cabinetware	22	15	26	38	28	20	18	17
Flax, Raw and Manufactures	31	42	39	33	22	18	17	17
Animals, Living ...	44	52	25	32	21	42	15	28
Fish (excluding canned fish)	31	20	22	26	24	13	14	15
Jute and Jute Goods ...	19	36	22	24	18	13	13	10
Clocks, Watches and parts	23	18	24	23	17	11	13	16
Coal and Coke	81	30	2,25	46	35	14	10	14
Matches ...	88	1,53	1.77	11	4	1	1	1
All other articles	7,96	1,033	24,24	15,05	10,54	9,67	10,31	10,602
TOTAL ..	1,15,85	1,47,80	2,54,05	2,40,80	1,64,79	1,26,87	1,32,58	1,15,88

Imports of Cotton, Twist and Yarn

(*Quantity in Lakhs of Lbs.*) (*Value in Lakhs of Rupees*)

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Per-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	370	247	257	201·1	103·2	119·1	133·6	99·5	335·2	295·9	126·6	121·8	·131·8	95·8
Switzerland	11·3	3·4	6	6·9	0·7	0·5	0·7	·1	...	9·7	0·9	0·6	0·7	·1
Italy	6·1	3·0	2·9	14·3	0·7	1·4	...	·2	5.0	16·6	0·8	1·2	..	·2
China (including Hongkong) ...	0·4	2·3	7·3	105·8	117·4	132·2	133·2	102·3	...	110·8	95·8	92·0	84·3	64·8
Japan	4·6	74·2	167·9	108·7	68·9	62·1	181·5	116·8	6·2	163·8	83·6	82·8	160·7	95·7
Other Countries	25·5	10·7	5·7	2·0	0·5	0·5	2·0	1·6	30·8	3·0	0·7	0·5	1·3	·9
TOTAL ...	417·9	340·6	445·8	448·8	291·4	315·8	451·0	320·5	377·2	509·8	308·4	298·9	378·3	257
Percentage of U. K.	88·5	72·5	57·5	45·8	35·4	37·4	29·6	31·0	88·8	49·3	41·0	40·7	34·8	36
Declared Value Per lbs.... ...	...	...	...	...	...	...	...	...	0-14-5	1-5-10	1-0-11	1-1-5	1-2-9	0-12-10

Imports of Cotton Piecegoods

(Quantity in Millions of Yards)

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Per-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Grey—														
United Kingdom	1,316	815·2	539	520	143·3	59·7	111·1	88·2	20,74	11,76	281	96	176	135
Japan	2·6	81·2	97	394	213·3	185·2	243·9	141·6	...	8,91	398	289	329·6	170
United States	10·4	7·4	8	1	0·5	0·5	0·3	·2	...	3	2	1	0·6	·5
Other Countries	2·0	1·1	3	10·5	2·9	4·0	0·7	·1	35	23	6	6	1·1	·2
TOTAL ...	1,331	904·9	677	925·5	365·0	249·4	356·0	230·1	21,09	20,93	687	392	507·3	305·7
White—														
United Kingdom	612·9	510·0	363·5	435·9	230	207	281	184·2	10,87	12,02	5,23	402	526·8	369
Netherlands	7·6	3·8	4·4	7·5	4·3	3·6	2·2	1·5	...	29	15	10·6	6·5	4
Switzerland	2·6	0·8	1·7	8·6	5·4	3·9	6·5	·6	...	35	19	17·1	2·5	2
Japan	...	3·3	2·6	13·9	28·1	59·8	220·4	75·2	.	33	51	93·4	162·5	96
Other Countries	1·1	1·0	1·4	7·7	3·9	3·4	2·6	·4	33	28	13	9·5	11·8	2
TOTAL ...	654·2	518·9	373·6	473·6	271·7	279·7	412·7	261·9	11,20	13,27	6,21	532·6	732·6	473

Imports of Cotton Piecegoods—(*Contd.*)

(*Quantity in Millions of Yards*) (*Value in Lakhs of Rupees*)

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Coloured, Printed or Dyed—														
United Kingdom	590·4	350·8	254·6	279·0	148·0	110·3	194·3	142·4	11,80	950	447·6	285·4	487·6	354·1
Germany	...	...	...	1·4	0·6	0·5	0·6	...	...	9	3·6	3·9	4·9	...
Netherlands	15·2	8·8	7·0	14·2	8·5	3·1	2·6	0·2	...	70	35·1	10·1	7·7	0·5
Belgium	4·1	0·5	0·8	0·9	0·4	0·2	0·2	...	...	8	3·0	1·3	1·5	...
Switzerland	2·7	1·7	1·5	1·6	0·7	1·6	3·3	...	...	10	3·8	6·9	14·1	...
Italy	16·3	9·1	4·2	23·0	8·8	9·9	7·2	0·4	...	83	28·1	25·9	18·8	1·4
Straits Settlements (including Labuan)	1·5	0·7	1·4	1·5	0·7	0·4	0·2	0·9	...	...	3·1	1·5	0·8	1·4
Japan	0·5	13·1	14·0	154·3	74·3	94·7	214·2	124·1	...	345	143·7	162·7	291·9	165·4
Other Countries	6·9	1·6	1·9	7·6	3·7	2·5	2·2	·7	1,65	33	13·9	7·5	6·8	2·6
TOTAL ...	631·6	386·3	285·4	483·5	245·7	223·2	424·8	268·7	12,95	15,15	681·9	505·2	834·1	525·4
Fents—														
United Kingdom	14·4	26·1	11·9	12·5	2·5	6·5	10·7	11·1	...	36·4	5·5	13·0	19·3	16·6
United States of America ...	0·3	5·3	4·3	23·9	4·8	16·4	19·4	15·6	...	52·7	9·8	22·9	30·2	15·9
Japan	...	...	...	...	...	...	1·2	8·2	..	...	...	...	1·3	11·9
Other Countries	0·2	0·5	0·1	0·4	0·3	0·4	0·4	0·1	...	1·2	0·5	0·8	1·1	0·5
TOTAL ...	14·9	31·9	16·3	36·8	7·6	3·3	31·7	35·0	...	90·3	15·8	36·7	51·9	44·9

Imports of Sugar

(*Quantity in Hundreds of Tons.*) (*Value in Lakhs of Rupees*)

Name of Countries	Pre-War Average 1909-10 to 1913-14	War Average 1914-15 to 1918.19	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	7	4	7	59,3	8,4	22,9	34,9	36,7	25·4	103·2	10·0	28·0	38·1	38·1
Ceylon	...	...	...	3,6	5,7	1,0	1	...	...	8·3	9·5	1·3	0·1	...
Straits Settlements ...	1,7	28,5	7.5	6	5	4	2	1	3·7	1·9	1·4	0·8	0·5	·4
Java	453,0	367,2	382,8	779,4	802,3	366,7	294,8	194,4	923·3	12,68·7	936·5	436·2	329·7	197·9
China (Incl. Hongkong)	4.4	5,7	6,5	5.9	5,0	4,0	2,2	34	10·3	6·3	8·9	9·0	4·4	4·9
Russia	...	...	..	...	42,6	68,4	8,8	...	...	...	44·8	66·3	8·9	...
Poland	...	...	...	24	1,6	1.3	...	...	...	3·1	2·0	15·4	...	...
Germany	...	...	...	13.7	11,5	15.4	2	...	3·8	24·0	15·0	17·7	0·3	...
Hungary	...	...	113	34,6	13,8	6	...	...	85·1	59·0	15·9	0·7	...	...
Czechoslovakia ...	...	...	...	95	5	9	4	..	...	18·0	0·7	1·2	0·5	...
Other Countries ...	174.2	70.2	35,2	30.0	9,2	34.5	27,8	26,6	209·4	58·9	9·1	24·1	29·7	2·9
TOTAL ...	634,0	472,0	444,0	939,0	901.1	516,1	369,4	26,12	12,51·0	15,51·4	10,53·8	600·7	412·2	2,70·3

Imports of Machinery and Millwork.

(*Value in Lakhs of Rupees*)

	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	497·7	420·4	17,60·3	13,68·3	10,72·2	7,73·2	7,81·2	8,73·5
United States of America	24·6	66·8	3,10·8	1,75·2	1,64·2	1,22·1	81·1	80·7
Japan	0·6	13·5	6·0	6·3	4·8	3·7	4·1	7·8
Italy	1·4	2·4	4·3	15·4	15·2	...	...	...
Germany	30·3	2·5	38·9	1,73·8	1,18·1	1,12·3	98·1	132·0
Belgium	1·8	...	..	17·7	14·4	26·8	38·6	42·6
Other Countries ...	4·7	8·3	44·5	79·3	45·9	55·2	51·1	140·3
TOTAL ...	561·1	5,13·9	21,64·8	18,36·0	14,34·8	10,92·3	10,54·2	12,76·9
Share of United Kingdom	88·7%	81·8%	81·3%	74·5%	74·7%	70·8%	74·1%	68·4%

Imports of some kinds of Iron and Steel Manufactures

(*Quantity in Thousands of Tons*) (*Value in Lakhs of Rupees*)

Name of Countries	1927-28	1928-29	1929-30	1930-31	1931-32	1322-33	1933-34	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
STEEL BARS (other than Cast Steel)														
United Kingdom ...	23·0	46·6	32·3	20·4	11·0	11·5	14·9	36·2	62·4	47·6	30·5	15·7	15·2	20
Germany	11·3	13·7	10·3	2·8	1·4	2·3	3·1	12·7	14·1	11·3	2·7	1·6	2·6	3
Belgium	110·6	80·2	81·5	43·7	33·5	32·0	27·7	1,03·3	82·8	85·3	38·9	25·6	22·7	23
Luxemburg	22·0	15·8	38·0	14·4	20·8	17·1	12·8	19·0	16·6	38·7	12·1	15·9	10·7	10
France	8·8	12·3	6·0	5·2	5·0	4·8	5·5	7·7	12·6	6·4	4·6	3·9	3·2	4
Other Countries ...	2·4	1·1	1·1	0·9	0·8	0·9	2·1	4·2	3·4	3 2	2 3	2·3	2·4	3
TOTAL ...	181·1	169·8	169·3	87·4	72·5	69·2	66·1	183·1	191 9	192·6	91·2	65·1	56·8	63
BEAMS, CHANNELS, PILLARS, GIRDERS AND BRIDGEWORK														
United Kingdom ...	63·2	67·6	51·5	36·9	14·0	5·8	9·2	98·8	1,00,7	79·1	62·3	22·1	8·4	13
Germany	3·1	2.2	6·8	8·6	6·0	1·1	2·3	4·7	1·9	7·7	6·9	4·7	0·8	2
Belgium	58·8	44·6	30·3	22·5	9·5	5·9	5·1	61·9	41·1	29·2	19·6	7·4	4·2	4
France	16·3	29·6	14·1	17·5	5·9	2·7	1·7	14·0	18·7	13·4	14·1	4·6	1·7	1
United States of America	0·1	0·1	0·2	0·2	.	...	...	0·7	0·5	0·6	0·6	...	...	...
Other Countries ...	2·8	0·6	1·8	1·1	0·7	0·2	·9	4·2	0·7	1·9	1·4	1·0	0·2	1
TOTAL ...	144·4	135·3	104·9	86·3	36·1	15·7	19·2	1,84·3	1,63·7	1,31·9	1,04·9	39·8	15·3	21
SHEETS & PLATES (including Galvanized and Tinned)														
United Kingdom ...	3,59	3,55	2,67	1,26	79	76	77	8,47	7,50	5,69	2·48	1,49	130	140
Belgium	53	56	65	59	32	24	9	85	93	1,19	99	60	35	12
nitedStates of America	12	14	11	11	...	...	...	42	49	37	36	1	...	...
Germany	1	1	1	1	...	...	...	1	1	1	1	...	...	...
Other Countries ...	11	7	7	7	3	2	6	21	14	12	13	5	5	14
TOTAL ...	4·36	4.33	3.51	2.04	1·14	1,02	92	9,96	9.07	7,38	3.97	2,15	1,70	166

Imports of Electrical Instruments, Apparatus and Appliances

(Value in Lakhs of Rupees)

Name of Countries		1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	...	199	215	174	115	122	131
Germany	...	30	43	43	33	34	25
Netherlands ...	...	15	16	15	13	11	12
Belgium ...	...	...	...	7	5	3	3
Italy	...	12	14	9	5	6	6
Japan	...	6	19	7	5	17	15
United States of America	...	39	47	44	30	27	24
Other Countries ...	...	12	16	12	17	17	15
TOTAL		3,13	3,61	3,11	2,23	2,34	2,31

Imports of Kerosene Oil

(Value in Lakhs of Rupees)

Name of Countries		1928-29	1929-30	1930 31	1931-32	1232-33	1933-34
Russia	...	83	42	56	...	1,64	1,50
Georgia ...	...	1,50	1,07	1,21	1,13	...	...
Azerbaijan ...	...	...	44	65	72	...	...
Persia	...	1,62	1,58	86	95	39	2
United States of America	...	95	1,47	1,43	1,28	18	13
Other Countries ...	...	86	91	63	25	33	68
TOTAL	...	5,76	5,89	5,34	4,33	2,54	2,33
Declared value per gallon	...	0-8-9	0-8-10	0-8-8	0-8-1	0-6-10	0-6-5

Imports of Cement

Name of Countries		1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	...	52	47	36	25	17	14
Germany ...	...	2	2	1	1	...	...
Japan ...	...	6	7	13	10	8	6
Other Countries ...	...	8	8	5	5	4	2
TOTAL	...	68	64	55	41	29	22
Declared value per cwt	...	2-10-7	2-10-1	2-7-4	2-5-0	1-12-0	1-10-11

Imports of Motor Vehicles

(*Quantity in Numbers*) — (*Value in Lakhs of Rupees*)

Name of Countries	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	War-Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Motor Cars (including Taxi-Cabs)—													
United Kingdom	3,758	2,885	2,178	3,958	5,348	77	24	80	97	71	50	80	106
United States of America ...	9,620	5,098	3,368	1,201	2,227	21	46	166	195	100	63	29	36
Germany	...	45	212	146	106	–	–	–	–	2	4	2	2
France	364	261	161	84	62	5	2	7	10	7	5	2	1
Italy	1,150	917	510	226	221	–	2	9	26	19	10	5	5
Canada	2,318	3,230	676	296	1,715	–	–	35	42	54	10	6	26
Others Countries	189	145	115	290	80	10	1	15	6	5	4	5	1
TOTAL ...	17,399	12,601	7,220	6,201	9,759	1,13	75	3,12	3,76	258	148	129	177
Motor Cycles (including Scooters)—													
United Kingdom	1,842	1,395	808	699	612	10.3	5.1	13.5	10.4	7.6	3.9	3.3	8
United States of America ...	35	53	8	1	12	–	–	–	0.2	0.3	–	–	0.1
Other Countries	79	53	110	82	76	0.40	1.3	5.9	0.4	0.2	0.3	0.2	0.2
TOTAL ...	1,956	1,501	926	782	700	10.7	6.4	19.4	11.0	8.1	4.2	3.5	3.3
Motor Buses—													
United Kingdom	398	258	435	517	528	3.6	2.7	22.8	17.5	15.2	14.4	9.9	12
United States of America ...	12,017	6,197	3,236	1,793	3,692	0.7	2.7	29.7	1,76.3	88.8	42.4	24.7	37
Canada	2,799	2,397	598	338	1,243	–	–	6.2	45.7	36.0	9.0	5.8	16
Others Countries	...	61	33	28	33	1.4	1.0	10.9	2.2	1.6	0.7	0.6	1
TOTAL ..	15,306	8,913	4,302	2,676	5,496	5.7	6.4	69.6	241.7	141.6	66.5	41.0	66

Imports of Rubber Manufactures

Name of Countries	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
	(Quantity in Thousands)							(Value in Lakhs of Rupees)						
Pneumatic Motor Covers														
United Kingdom ...	1,16	1,17	1,32	81	87	1,08	1,97	47.6	45.4	59.4	37.0	30.8	44.8	71
Germany	11	19	36	31	18	16	10	4.5	7.1	19.3	17.1	7.9	8.1	4
France	63	48	34	20	23	15	7	22.8	17.6	11.4	6.5	7.5	6.1	8
Italy	27	46	49	28	30	33	10	8.9	17.0	21.4	13.4	12.5	13.8	4
Canada	89	1,45	1,17	55	24	12	22	36.1	56.9	53.1	20.3	7.6	4.8	7
United States of America	1,08	82	1,13	1,41	1,59	87	37	48.5	37.0	59.1	68.9	66.1	40.4	16
Other Countries ...	5	6	6	15	7	21	28	0.9	1.6	1.9	4.8	2.4	7.7	8
TOTAL ...	4,19	4,63	4,87	3,71	3,48	2,92	3,11	169.3	182.6	225.6	168.0	134.8	125.7	113
	(In Hundreds of Numbers)							(In Thousands of Rupees)						
Pneumatic Motor Cycle covers														
United Kingdom ...	84	97	1,09	32	46	32	38	116.0	85.1	78.5	47.2	61.4	51.4	63
United States of America	10	1	7	3	7	5	2	14.8	2.4	14.9	5.0	8.8	7.6	2
Other Countries ...	32	64	47	56	36	17	11	41.8	78.3	36.6	50.0	36.0	21.8	13
TOTAL ...	1,26	1,62	1,63	91	89	54	51	172.6	165.8	130.0	102.2	106.2	80.8	78
	(In Thousands of Numbers)							(In Lakhs of Rupees)						
Pneumtic cycle covers														
United Kingdom ...	3,50	4,18	8,44	6,29	9,56	7,74	11,17	7.2	8.0	14.2	10.4	14.6	11.8	14.8
Germany	8	38	1,20	1,02	2,41	45	38	0.2	0.6	1.8	1.5	3.3	0.7	.4
Franee	2,49	2,32	2,03	1,83	1,72	86	97	4.4	4.8	3.2	3.4	2.9	1.4	1.2
Other Countries ...	34	98	47	1,76	2,65	4,64	5,20	0.6	2.6	0.8	2.8	3.9	4.9	5
TOTAL	6,41	7,86	12,14	10,90	16,34	13,69	17,72	12.4	16.0	20.0	18.1	24.7	18.8	21.4
	In Hundreds of Numbers)							(In Thousands of Rupees)						
Solid Rubber Tyres for Motor Vehicles														
United Kingdom ...	55	43	24	23	18	18	24	661.6	481.3	253.4	224.5	169.4	183.4	237
Germany	13	10	12	5	7	2.9	5	174.6	145.1	179.1	63.9	85.5	33.2	57
United States of America	34	20	20	16	8	7.8	2	434.6	263.4	288.5	164.7	98.2	91.2	36
Other Countries ...	1[illegible]	8	4	1	2	0.6	1	199.5	114.9	44.0	11.1	22.9	6.4	.6
TOTAL ...	1,18	81	60	45	35	29.3	32	14,70.3	10,04.7	765.0	464.2	376.0	314.2	33.6

Imports of Metals and Metal Manufactures

(Value in Lakhs of Rupees)

Copper (excluding Ore)

Name of Countries	Post-War Average 1909-20 to 23-24	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ...	1,14	30	29	29	28	40
Japan	8	4	...	...	...	...
France	4	18	20	13	1	...
Germany	20	31	29	29	67	82
Belgium	2	5	5	2	4	1
Other Countries ...	44	6	21	12	15	14
TOTAL ...	1,92	94	1,04	85	1,15	87
Declared value of Copper Wrought per cwt. ...	...	64-9 2	51-7-0	41-13-4	35-4-10	31-9-7

Hardware (excluding Cutlery and Electroplated Ware)

	Post-War Average 1919-20 to 1923-24	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom ..	3,12	1,80	1,31	96	91	98
Sweden	13	17	13	12	15	16
Germany	59	165	1,08	76	1,08	86
Austria	5	12	7	4	5	4
Japan	46	26	21	16	30	35
United States of America ..	1,22	59	45	27	17	23
Other Countries ...	22	48	35	30	33	26
TOTAL	5,79	5,07	3,60	2,61	2,99	2,88

Cutlery

	Pre-War Average 1909-10 to 1913-14	1929-30	1930-31	1931,32	1932-33	1933-34
Utited Kingdom ...	10·5	11.1	8·3	5·9	6·5	7·8
Germany	7·9	26·8	15·7	13·2	14·3	13·7
Other Countries... ...	3·3	3·5	2·0	1·6	3·5	4·0
TOTAL	21·7	41·4	26·0	20·7	24·3	

Imports of Salt

	Pre-War Average 1909-10 to 1913-10	1929-30	1930 31	1931-32	1932-33	1933-34
United Kingdom ...	27	19	9	6	4	1
Germany	17	14	20	5	10	8
Spain	24	14	11	...	4	...
Aden & Dependencies ...	53	44	28	49	40	35
Egypt	35	21	22	2	6	1
Italian Eat Africa ...	15	13	22	10	14	1
Other Countries	4	5	3	...	1	1
TOTAL ...	1,75	1,30	1,15	72	79	47
Declared value per ton ...	29-5-2	20-4-0	16-11-10	15-15-4	14-8-8	13-6-5

Imports of Boots and Shoes.—(*Contd.*)

(*Quantity in Thousands of Pairs*) (*Value in Lakhs of Rupees*)

Name of Countries	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	634	245	153	207	129	51·0	22·3	11·1	6·6	6·2	5·8
Germany	552	204	64	93	46	...	7·3	2·2	0·7	1·1	1
Austria	219	34	7	2	...	2·5	2·6	0·5	0·3	0·2	...
Czechoslovakia	47	61	63	258	377	...	2·1	2·3	2·4	4·6	5·9
Japan	40,44	10,089	8,734	6,892	6,620	0·2	29·4	67·2	48·7	31·6	32·4
United States of America ...	538	104	7	2	1	0·5	10·4	1·5	0·2	0·1	...
Canada	549	70	1	...	2	...	10·4	1·5	...	...	...
Other Countries	178	114	461	418	138	2·5	3·3	1·7	6·0	8·0	2·4
TOTAL	6,761	10,921	9,490	7,882	7,313	56·7	87·8	88·0	64·9	51·8	47·5
Total of U K. & Canada ...	1,183	315	154	207	131	...	32·7	12·6	6·6	6·2	5·8
Percentage of U. K. & Canada in Total	17·5	2·9	1·6	2·6	1·8	...	37·2	14·3	10·2	12·0	1·3
Declared value per pair ...	...	..	...	...	...	2-7-2	1-4-9	0-12-11	0-10-11	0-10-6	0-10-5

Imports of Cotton Raw.

(*Quantity in Hundreds of Tons*) (*In Lakhs of Rupees*)

	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	3·4	21·7	5·2	6·1	...	58·7	4·7	27·4	4·2	4·6	...
Persia	2·2	0·8	4·6	8·8	9	...	1·9	0·6	2·4	4·5	4
Egypt	5·1	213·4	148·6	91·4	6·1	4·5	8·0	216·7	131·0	77·9	5·3
Kenya Colony ...	190·4	226·9	321·8	206·9	24·2	0·1	280·6	288·0	316·8	177·7	20·2
Tanganyika Territory ...	5·7	3·9	5·7	9·4	2·6	...	7·6	10·4	4·6	8·1	2·3
Anglo-Egyptian Sudan .	...	0.3	16·8	64·5	9	...	..	0·3	16·9	66·2	7
United States of America ..	16·9	97·6	286·2	157·9	8·1	27·7	19·6	83·2	223·6	384·6	6·4
Other Countries	16·1	12·0	4·3	2·6	1	11·2	19·7	12·3	3·9	2·1	2
TOTAL ...	239·8	584·6	793·2	847·6	42·9	102·2	342·1	638·9	703·4	725·7	35·5
Total British Empire ...	193·8	251·9	343·8	277·5	33·8	58·8	285·3	315·7	332·9	248·5	28·9
Percentage of British Empire ...	80·8	13·1	43·3	32·9	78·7	57·5	83·4	49·4	47·3	34·2	81·3

Imports of Silk—Raw and Manufactured.

(In Lakhs of Rupees.) *(Quantity in Thousands of lb.)*

Name of Countries	Pre-War Average	War Average	Post-War Average	1929-30	1930-31	1931-32	1932-33	1933-34	War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Raw Silk—														
China (including Hong-kong)	1,07·1	99·8	...	120·1	87·5	60·7	1,10·3	64	...	2,101	1,923	1,529	2,930	2,101
Japan	1·1	...		1·6	0·7	1·6	4·7	7	...	38	17	34	165	220
Other Countries ...	9·1	10·2	9·1	1·4	...	...	2·1	1	...	6	...	...	92	58
Total ...	1,17·3	1,10·0	1,49·9	123·1	88·2	62·3	1,17·1	72	2,567	2,175	1,940	1,563	3,187	2,379
Declared value per lb.	4-9-1	5-10-1	8-3-9	5-10-7	4-3-9	3-15-9	3-10-9	3-1-9	...	...	...	...	...	...
Silk Yarn, etc.—														
United Kingdom ..	4·3	4·0	1·9	0·8	1·3	1·7	6·6	4·3	...	18·5	31·4	62	260	268
Switzerland ...	0·6	0·3	0·3	10·1	5·8	10·7	3·1	...	...	178·9	128·6	289	96	...
Italy	14·2	3·6	14·6	29·6	15·9	19·2	23·6	5·1	...	730·3	432·3	622	862	249
China (including Hong-kong)	2·8	5·1	9·9	5·7	13·0	9·3	11·2	14·6	...	229·6	395·9	313	418	615
Japan	17·4	29·1	30·3	13·9	9·2	5·1	40·4	21·8	...	474·9	237·8	116	1,187	814
Other Countries ...	1·9	0·1	1·3	11·7	6·7	5·2	3·5	·9	...	323·3	198·4	278	187	82
Total ...	41·2	42·2	58·3	71·8	51·9	51·2	88·4	46·7	1,011	195·6	1,424·4	1,710	3,010	2,028
Declared value per lb.	4-1-2	5-5-10	7-15-0	3-10-9	3-10-3	2-15-11	2-15-0	2-4-10	...	...	...	...	...	...
Silk Piece-goods—														
United Kingdom ...	3·9	4·1	5·2	1·1	0·6	1·6	0·9	0·7	...	43·7	26·6	147·5	92·0	48
France	8·9	3·7	2·6	4·6	1·0	0·6	0·4	...	...	92·9	28·7	14·6	8·1	...
China (including Hong-kong)	53·5	73·9	135·0	80·7	61·8	50·1	41·8	32·1	...	8,384·1	8,377·3	7,828·4	7,941·5	6,656
Japan	118·6	1,17·9	177·6	126·2	60·0	71·9	133·0	147·4	...	13,892·0	7,834·7	11,744·7	26,768·1	34,269
Other Countries ...	2·4	1·9	4·2	10·0	4·0	2·0	1·8	2	..	1,011·9	487·6	189·0	148·2	150
Total ...	1,82·3	2,01·5	3,24·6	2,22·6	126·9	126·2	180·9	182·2	26,030	22,924·6	16,754·9	19,724·2	34,957·9	41,123
Percentage of United Kingdom ...	2·1	2	1·6	0·49	0·47	1·3	0·5	..	...	...	...	...	...	...
Declared value per yd.	0-11-2	...	...	0-15-6	0-12-1	0-10-2	0-8-3	0-7-0	...	..	...	..	...	...

Imports of Wool and Woollens

(Value in Lakhs of Rupees)

		1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Wool Raw—							
United Kingdom		19	17	5	9	18	14
Persia ..		9	9	3	5	3	2
Australia ...		17	22	10	15	18	18
Other Countries		4	4	1	2	3	·25
	TOTAL	49		19	31	42	34
Carpets and Floor Rugs—							
United Kingdom		6·1	3·4	2·4	2·0	1·8	1·5
Persia ...		1·8	1·5	1·1	2·1	0·8	0·2
Other Countries		1·6	4·0	1·0	1·1	1·5	0·6
	TOTAL	9·5	9·9	4·5		4·1	2·3
Piece-goods—							
United Kingdom		1,21·7	90·8	47·7	24·8	52·5	57·4
Germany ...		38·4	24·6	8·2	4·2	8·8	6·5
Netherlands ...		7·2	8·4	3·7	2·4	1·6	0·9
Belgium ...		7·9	5·4	3·9	1·5	5·9	4·6
France ...		61·5	60·1	24·0	16·1	34·3	17·4
Italy ...		31·1	29·8	25·3	15·1	42·1	22·6
Japan ...		2·5	4·8	2·9	0·7	7·8	15·5
Other Countries		13·7	9·3	4·2	3·9	8·2	5·4
	TOTAL	2,84·0	33·2	1,19·9	68·9	1,61·2	1,30·3

(In Lakhs of Rupees)

Woollen Shawls—		Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
United Kingdom	...	...	2·8	0·7	0·1	0·4	0·2
Germany ...	...	...	16·3	9·6	4·9	7·9	7·5
Other Countries	..	...	7·8	3·8	0·9	2·6	1·7
	TOTAL	41·5	26·9	14·1	5·9	10·8	9·5
Hosiery ...	...	12·0	20·0	9·7	6·7	6·9	8·8
Other sorts of Manufactures		32·1	86·5	63·9	44·4	71·5	69·9
TOTAL OF WOOL & WOOLLENS		3,24·6	4,28·5	2,31·1	1,62·1	2,96·5	2,54·9

Imports of Artificial Silk Manufactures.

(Value in Lakhs of Rupees)

	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Piecegoods of Cotton and Artificial Silk—							
United Kingdom ...	99·1	84·1	41·6	12·7	9·6	17·1	14·1
Germany	49·7	26·6	9·7	3·9	4·9	7·8	2·1
Switzerland	88·9	53·2	43·4	15·3	7·6	4·4	11·1
Italy	91·3	92·6	51·2	19·6	16·0	21·8	16·3
Austria	25·3	17·6	9·2	2·8	1·6	3·0	3·7
Japan	10·3	30·5	140·0	150·4	208·6	252·4	124·2
Other Countries ...	21·8	25·8	19·9	6·9	3·5	3·7	2·4
TOTAL ...	386·4	330·4	315·0	211·6	251·8	310·2	173·9
Other Artificial Silk Manufactures—							
United Kingdom ...	49·2	33·2	24·3	14·2	13·3	15·1	17
Germany	7·1	12·5	7·2	5·3	4·0	3·9	4·7
Netherlands	10·7	13·4	6·4	8·7	10·1	7·1	2·0
France	11·0	6·5	11·6	1·4	7·3	3·3	4·2
Switzerland	6·1	6·3	5·3	0·9	2·8	0·7	·2
Italy	66·4	61·6	46·4	50·6	41·3	47·8	37·6
United States of America	...	.	...	0·8	1·8	2·2	·9
Japan	3·2	3·4	5·5	3·8	6·2	16·0	31·6
Other Countries ...	8·7	9·7	10·3	4·4	5·7	9·6	2·1
TOTAL ...	162·4	146·6	117·0	90·1	92·5	105·7	100·6

Imports of Tea (Black and Green)

(Value in Thousands of Rupees)

Names of Countries	Pre-War Average	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Ceylon	7,10	16,24	18,88	15,41	18,09	11,83	525
Straits Settlements ...	...	2,02	1,32	96	56	53	18
Java	81	28,28	22,53	7,63	4,50	1,00	1
China (including Hongkong)	10,70	23,61	20,21	20,90	19,10	18,60	16,28
Other Countries ...	3,68	4,07	96	78	1,32	2,67	3,42
TOTAL ...	22,29	74,22	63,90	45,68	43,57	34,63	2,514

Imports of Food, Drink and Tobacco

Name of Countries	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	Pre-War Average	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
	(Quantity in Thousands of Tons)						*(Value in Thousands of Rupees.)*						
Fruits and Vegetables, Dried, Salted, etc.—													
France	1·2	0·3	0·2	0·5	0·3	0·2	9,60	9,71	2,74	1,27	2,49	1,60	1,17
Italy	2·7	3·6	2·8	1·8	1·7	1·6	8,50	27,12	38,26	25,14	6,83	6,94	8,63
Maskat Territory and Trucial Oman	7·7	7·8	6·1	8·3	7·1	7·9	18,80	17,64	18,85	14,15	16,54	13,00	10,96
Iraq	36·1	42·8	45·6	41·5	37·4	2·6	...	55,56	60,04	49,72	40,49	32,76	20.50
Persia	5·4	5·4	5·3	5·6	3·2	3·2	18,70	23,67	21,61	18,51	16,83	9,50	6,56
Other Countries	7·3	10·4	9·4	12·9	10·9	17·4	52,72	8,57	7,77	19,13	24,66	20,59	24,06
TOTAL ...	60·4	70·3	69·4	70·5	60·6	57·3	1,07,72	1,42,26	1,49,27	1,17,92	1,07,84	84,39	71,88
	(Quantity in Thousands of Gallons.)							*(Value in Lakhs of Rupees)*					
All, Beer and Porter—													
United Kingdom	2,805	3,148	3,017	2,473	2,447	2,184		61·3	68·7	63·7	48·8	49·7	45·2
Germany	1,022	1,018	899	555	508	376	45·6	28·1	30·1	25·2	14·8	14·3	10·6
Netherlands	255	337	369	342	282	308	...	5·4	6·8	7·5	6·5	6·0	6·5
Japan	231	288	279	260	416	526	...	3·9	4·6	4·6	3·8	4·4	1·5
Other Countries	57	43	46	95	65	62	... 13·83	1·6	1·1	1·3	2·2	1·6	1·5
TOTAL ...	4,370	4,864	4,610	3,725	3,718	3,456	59·43	1,00·3	1,11·3	1,02·3	76·1	76·0	68·8
	(Quantity in Thousands of Gallons)							*(Value in Lakhs of Rupees.)*					
Spirit—													
United Kingdom	753	761	708	463	476	493	69	1,36	1,41	1,25	83	84	89·4
Germany	61	60	37	16	11	12	..	7	6	5	3	2	3·4
France	416	426	339	157	122	128	...	52	53	42	22	21	22·2
Java	786	1,054	1,144	1,069	837	521	3	10	12	12	10	8	7·0
United States of America ..	58	66	57	46	18	45	5	17	19	17	14	16	1·4
Other Countries	41	47	33	19	11	11	38	4	5	4	3	2	2·6
TOTAL	2,115	2,414	2,318	1,770	1,775	1,213	1,15	226	236	205	135	1,33	138·6
Wines	292	290	246	165	166	177	28	30	29	24	15	16	19·2
TOTAL OF LIQUORS	6,777	7,568	7,174	5,660	5,409	4,846	2,12.43	356·3	3,76·3	3,31·3	2,26·1	2,25·0	2,26·6

Imports of Food, Drink and Tobacco—(*Contd.*)

(In Lakhs of Rupees)

Name of Countries	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Provisions, etc.—						
United Kingdom ...	1,34	2,35	1,94	1,51	1,40	1,51
Netherlands	9	1,58	1,27	57	35	24
Straits Settlements (incl. Labuan)	24	32	32	24	20	20
China (incl. Hongkong) ...	4	16	15	10	8	9
United States of America...	4	48	40	22	19	14
Australia	3	9	9	13	18	16
Other Countries ...	51	66	71	64	53	38
TOTAL ...	2,29	5,64	4,88	3,41	2,93	2,72

(In Thousands of Rupees)

Name of Countries	Pre-War Average	1929-30	1930-31	1931-32	1932-33	1933-34
Tobacco—						
Unmanufactured ...	...	39,72	14,40	29,86	62,27	47,27
Cigars	...	1,75	1,60	1,04	85	74
Cigarettes :						
United Kingdom ...	...	2,11,76	1,17,95	48,55	26,31	16,62
China (incl. Hongkong) ...	...	...	2,07	2,70	1,04	34
Egypt	4,69	61	44	63	32	32
United States of America ...	...	40	1,04	55	50	52
Other Countries ...	...	40	98	35	78	1,26
Total of Cigarettes ..	52,74	2,13,17	1,22,48	52,78	28,95	19,06
Tobacco for Pipes & Cigarettes	...	13,57	10,89	8,54	3,06	3,00
Other Sorts	18,33	1,51	1,80	2,13	1,80	2,08
	71,07	2,69,71	1,51,16	94,35	96,94	72,15

Table showing the total Exports to each principal country, the Imports from the respective country and the Balance of trade with each such country, distinguishing between countries in the British Empire and foreign countries, for Pre-War, War and Post-War years ending with 1933-34.

(In Lakhs of Rupees.)

Name of Country	Pre-War Average (1909-14) Exports	Imports	Balance of trade	War Average (1914-19) Exports	Imports	Balance of trade	Post-War Average (1919-24) Exports	Imports	Balance of trade	1925-26 Exports	Imports	Balance of trade
British Empire—												
United Kingdom	56,30	91,58	−35,28	69,62	83,56	−13,94	73,04	1,46,43	−73,39	80,97	1,15,32	−34,35
Ceylon	8,24	72	+7,52	9,63	1,66	+7,97	12,32	1,71	+10,61	15,23	1,70	+13,53
Straits Settlements	7,73	3,08	+4,65	6,23	4,37	+1,86	8,20	4,85	−3,35	10,17	5,66	+4,51
Australia	3,14	1,01	+2,13	5,03	1,11	+3,92	4,99	3,19	+1,80	7,56	1,44	+6,12
Hongkong	9,26	98	+8,28	4,48	1,30	+3,18	6,93	1,86	+5,07	2,96	84	+2,12
Canada	1,09	1	+1,08	1,79	4	+1,75	1,83	69	+1,14	2,12	1,30	+82
Aden and Dependencies ...	1,25	41	+84	2,15	77	+1,38	2,79	80	−1,99	1,67	43	+1,24
Kenya Colony, Zanzibar and Pemba	89	36	−53	1,32	1,15	+17	2,14	1,99	+15	2,09	4,07	−1,98
Other Countries of the British Empire	4,16	3,39	+77	15,53	2,68	+12,85	12,88	4,02	+8,86	3,87	43	+3,44
Total British Empire ...	92,06	1,01,54	−9,48	1,15,78	96,64	+19,14	1,25,12	1,65,54	−40,42	1,26,64	1,31,19	+4,55
Percentage of Total Trade...	41·1	69·6	...	51·6	65·4	.	41·4	65·2	...	33·8	58·0	...
Foreign Countries—												
United States of America ...	16,90	4,49	+12,41	26,75	10,29	+16,46	36,26	21·64	+14,62	40,22	15,07	+25,15
Japan	16,86	3,64	+13,22	25,20	15,41	+9,79	40,31	17,48	+22,83	56,66	18,19	+38,47
China	8,74	1,58	+7,16	4,56	1,93	−2,63	10,98	3,14	+7,84	15,44	2,61	+12,83
Java and Borneo	2,91	9,35	−6,44	2,55	11,56	+9,01	3,18	17,18	—14,09	4,76	15,51	−10,75
Argentine Republic	2,27	...	−2,27	2,61	...	+2,61	4,21	...	+4,21	5,62	...	+5,62
France	14 82	2,21	+12,61	10,02	1,85	−8,17	14,37	2,37	+12,00	21,11	3,24	+17,87
Italy	7,08	1,45	+5,63	8,77	1,73	+7,04	9,63	2,47	+7,16	18,98	4,26	+14,72
Spain	1,99	17	+1,82	1,60	36	−1,24	2,80	30	+2,50	4,78	17	+4,61
Russia	1,94	22	+1,72	2,74	10	+2,64	...	12	—12	19	...	+19
Netherlands	3,34	1,27	+2,07	40	86	−46	3,16	2,18	+98	7,60	3,69	+3,91
Belgium	11,97	2,76	+9,21	1,10	38	+72	11,25	4,64	+6,61	12,34	6,12	+6,22
Germany	22,36	9,35	+13,01	2,04	1,04	+1,00	14,86	7,16	+7,70	26,77	13,31	+13,46
Austria	7,77	3,19	+4,58	94	27	+67	73	42	+31	27	1,24	+97
Other Countries	1,311	4,53	+8,58	19,05	6,28	+1,277	25,12	9,41	+1,571	33,46	11,58	+21,88
Total Foreign Countries ...	1,32,06	44,31	+87,75	1,08,33	51,16	+57,17	1,76,86	88,51	+88,35	2,48,20	94,99	+1,53,21
GRAND TOTAL	2,24,12	1,45,85	+78,27	2,24,11	1,47,80	+76,31	3,01,98	2,54,05	+47,93	3,74,84	2,26,18	+1,48,66

Table showing the total Exports to each principal country, the Imports from the respective country and the Balance of trade with each such country, distinguishing between countries in the British Empire and foreign countries, for Pre-War, War and Post-War years ending with 1933-34—*contd.*

(In Lakhs of Rupees.)

Name of Country	1926-27 Exports	1926-27 Imports	1926-27 Balance of trade	1927-28 Exports	1927-28 Imports	1927-28 Balance of trade	1928-29 Exports	1928-29 Imports	1928-29 Balance of trade	1929-30 Exports	1929-30 Imports	1929-30 Balance of trade
British Empire—												
United Kingdom	66,28	1,10.54	−44,26	81,76	1,19,21	−37.45	72,37	1,13.24	−10,87	69,59	1,03,10	−33,51
Ceylon	14,86	1,37	−13,49	15,88	1,90	+13,98	14,25	2,10	+12,15	13,22	1,80	+11,42
Straits Settlements	9,50	5,82	+3.68	9,28	5,84	−3,44	7,95	5.11	+2,84	8,02	6,17	+1,85
Australia	7,80	1.70	+6.10	6,62	1,92	4,70	7.39	8,46	−1,07	5,80	5,54	+26
Hongkong	3,03	90	+2,13	2,20	1,16	1,04	2,51	78	−1,73	3,04	74	+2,30
Canada	2,05	1,69	+36	2,19	1,79	40	2.45	2,46	−1	2,41	1,91	+50
Aden and Dependencies ...	1.63	53	+1,10	1,91	66	1,25	2,02	62	+1,40	1,43	57	+86
Kenya Colony. Zanzibar and Pemba	2,00	2.55	− 55	1,90	2.59	−69	1,77	2,72	−95	1,72	3,44	−1,72
Other Countries of the British Empire	11,81	1,93	+9,88	9,95	1,30	+8,65	9,21	1,09	+8,12	9,38	1,19	+8,19
Total British Empire ...	1,18,96	1.27,03	−8,07	1,31,69	1,36,37	−4,68	1,19,92	1,36,58	−16,66	1,14,61	1,24,46	−9,85
Percentage of Total Trade ...	38·4	54·9	...	40·1	54·6	...	35·5	53·9	..	36·0	51·7	...
Foreign Countries—												
United States of America ...	34,41	18,24	+16,17	36,70	20,43	+16.27	39,97	17,92	+22,05	37,03	17,66	+19,37
Japan	41,27	16.47	+21.80	29.19	17.90	+11,29	34,61	17,68	+16,93	32,56	23,59	+8,97
China	11,31	3,31	+8,00	4.58	4.41	+17	9.18	4,32	+5,16	13,06	4,10	+8,96
Java and Borneo	2,99	14,42	−11,43	2,40	14,71	−12,31	3,69	16.42	−12,73	4,27	13,67	−9,40
Argentine Republic	6,78	...	+6,78	7,49	.	+7,49	8,01	16	−7,85	7,10	8	+7,02
France	13,97	3,56	−10,41	16,10	4.30	+11,80	17,91	4,78	+13,13	16,94	4,57	+12,37
Italy	11,57	6,16	+5,41	13,05	6.76	+6,29	15,25	7,36	+7,89	11,47	6,73	+4,74
Spain	2,75	21	+2,54	3,31	34	+2,97	3.91	27	+3,64	3,61	30	+3,31
Russia	9	52	−43	49	48	+1	25	85	−60	40	46	−6
Netherlands	6,24	4,66	+1,58	8,13	4,81	−3,32	8.73	4,77	+3,96	8,90	4,23	+4,67
Belgium	8.83	6,80	−2.03	10,97	7,48	+3,49	13,15	7,20	+6,25	12,21	6,79	+5,42
Germany	21,48	16,91	+4.57	32,46	15,34	+17,12	32,48	15,84	+6,24	26,49	15,79	+10,70
Oustria	26	1,11	−85	28	1.26	−98	9	1,40	−1,31	5	1,23	−1,18
Ather Countries	28,53	11,62	+16,71	31,85	15.26	16,59	30,21	17,75	+12,46	29,23	17,14	+12,09
Total Foreign Countries ...	1.90.48	1,04,19	+86,29	1.97.00	1,13,48	+83,52	2.18,04	1,16,72	+1,01,32	2,03,32	1,16,34	+86,98
GRAND TOTAL	3,09,44	2,31.22	−78.22	3,28,69	2,49,85	+78,84	3,37,96	2,53,30	+84,66	3,17,93	2,40,80	+77,13

Table showing the total Exports to each principal country, the Imports from the respective country and the Balance of trade with each such country, distinguishing between countries in the British Empire and foreign countries for Pre-War, War and Post-War years ending with 1933-34.—*contd.*

(In Lakhs of Rupees)

Name of Country	1930-31			1931-32			1932-33			1933-34		
	Exports	Imports	Balance of trade	Exports	Imports	Balance of trade	Exports	Imports	Balance of trade	Exports	Imports	Balance of trade
British Empire—												
United Kingdom	54,23	61,29	−7,06	43,46	44,76	−1,30	37,55	48,77	−11,22	46,58	47,59	−1,01
Ceylon	11,38	1,43	+9,95	7,65	1,39	+6,26	6,57	1,78	+4,79	5,93	1,39	+4,54
Straits Settlements	6,31	3,97	+2,34	4,70	2,87	+1,83	3,65	2,79	+86	3,35	2,68	+67
Australia	4,49	2.42	−2.07	2,95	1,58	+1,37	3,88	1,07	+2,81	2,98	1,03	+1,95
Hongkong	1,67	87	−80	1,81	52	+1,29	1,39	1	+1,38	1,07	45	+62
Canada	1,72	1,33	+39	1,47	42	+1,05	1,62	34	+1,28	1,87	69	+1,80
Aden and Dependencies ...	1,31	33	+98	77	53	−24	62	43	+19	65	38	+27
Kenya Colony, Zanzibar and Pemba	1,16	3,36	−2,20	77	3,68	−2,91	64	2,22	−1,58	57	2,48	−1,91
Other Countries of the British Empire	7,18	1,02	+6,16	5,14	87	+4,27	4,54	1,95	+2,59	4,60	1,00	+3,60
Total British Empire	89,45	76,02	+13.43	68,72	56,62	+12,10	60,46	59,36	+1,10	67,60	57,69	+9,91
Percentage of Total Trade ...	39·6	46·1		44·1	44·8							
Foreign Countries—												
United States of America ...	21,14	15,12	+6,02	13,87	12,85	+1,02	9,76	11,25	−1,49	13,93	7,17	+6,76
Japan	23,87	14.51	+9,36	13,95	13,34	+61	13,95	20,50	−6,55	12,61	16,36	−3,75
China	13,27	3.33	+9,94	7,79	2,76	+5,03	3,55	2,95	+60	4,45	2,26	+2,19
Java and Borneo	2,63	10,34	−7,71	1,74	4,86	−3,12	73	4,17	−3,44	48	2,68	+2,20
Argentine Republic	3,63	...	−3,63	2,39	...	+2,39	3,64	...	+3,64	...	...	...
France	11,17	2,89	−8,28	7,48	2,17	+5,31	7,35	2,03	+5,32	6,90	1,51	+5,39
Italy	7,93	4,51	+3,42	5,40	3,61	+2,79	4,65	3,95	+70	5,69	2,91	+2,78
Spain	2,37	30	+2.07	1,34	20	+1,14	1,37	25	+1,12	1,41	21	+1,20
Russia	53	1,04	−51	53	95	−42	34	36	−2	8	1,64	−1,56
Netherlands	6,67	3,22	+3.45	4,66	2,04	+2,62	3,21	1,69	+1,52	3,56	1,81	+1,75
Belgium	7,57	4,67	+2,90	4,24	3,02	+1,22	3,98	3,42	+51	4,34	2,67	+1,67
Germany	14,26	12,38	+1,88	10,19	10,21	−2	8,00	10,37	−2,37	9,48	89	+59
Austria	...	82	−82	...	71	−71	...	64	−64	...	52	−52
Other Countries	21,15	15,67	+5,48	13,59	13,00	+59	11,49	10,64	−85	15,79	9,07	+6,72
Total Foreign Countries ...	1,36,19	88,80	+47,39	87,17	69,72	+17,45	71,97	73,22	−1,25	78,72	57,70	+21,02
GRAND TOTAL	2,25,64	1,64,82	+60,82	1,55,89	1,26,34	+29,55	1,32,43	1,32,58	−15	1,46,32	1,15,39	+30,93

N.B.—In this Table the figures of re-exports are not taken into account.

Index Numbers of wholesale Prices of some principal Countries.

(Adapted from League of Nations' Bulletin)

COUNTRY	INDIA (CALCUTTA)	UNITED KINGDOM	UNITED STATES OF AMERICA	JAPAN	FRANCE	GERMANY
Basis Year & Date	(July 1914=100)	(1913=100)	(1913=100)	(1913=100)	(1913=100)	(1913=100)
1913 (1914) ...	100	100	100	100	100	100
1925 ...	159	159	148	202	...	142
1926	148	148	143	179	695	134
1927	148	142	137	170	642	138
1928	145	140	139	171	645	140
1929	141	137	137	166	627	137
1930	116	120	124	137	554	125
1931	97	104	105	116	502	111
1932	91	102	93	122	427	97
1933	87	101	95	136	398	93
1933						
January	88	100	87	140	411	91
February	86	99	86	136	404	91
March	82	98	86	134	390	91
April	84	97	87	133	387	91
May	87	99	90	134	383	92
June	89	102	93	136	403	93
July	91	102	99	138	401	94
August	99	103	100	136	397	94
September ...	88	103	101	138	397	95
October	88	103	102	136	397	96
November ...	88	103	102	135	403	96
December ...	89	103	101	133	407	96
1934						
January	90	105	103	133	405	96
February	89	105	105	134	400	96
March	[illegible]	104	106	134	394	96

Cost of living Index Numbers for India and Foreign Countries.

Name of Country	India (Bomay)	United Kingdom	United States of America	France (Paris)	Germany	Japan (Tokio)
Composition Base Period	A-D July, 1914	A-E July, 1914	A-E 1923	A-E July, 1914	A-E October, 1913, January, April and July, 1914	A-C, E July, 1914
1926	155	172	104	505	141	199
1927	154	168	102	514	148	189
1928	147	166	100	519	152	184
1929	149	164	100	556	154	181
1930	137	158	96	581	147	155
1931	110	147	87	569	136	136
1932	109	143	134	526	121	137
1933	102	143	132	520	119	146
April 1933 ...	100	136	...		117	144
May ,, .	104	136	...	516	118	143
June ,, ..	103	138	128		119	142
July ,, ...	103	139	...		119	143
August ,, ..	102	141	...	516	118	144
September ,, ..	100	141	...		119	147
October ,, ...	101	143	...		120	148
November ,, ...	98	143	...	526	120	149
December ,, ...	96	142	135		121	149
January 1934 ...	96	141	...		121	147
February ,, ...	94	140	...	526	121	148
March ,, ...	...	139	...		121	149

Composition of the cost of living indices: A, Foodstuffs; B, heating and lighting; C, clothing: D, rent; E. miscellaneous and other expenses.

Tonnage of vessels engaged in the foreign sea-borne trade of British India

(In Thousands of tons)

Nationality	1924-25 Entered	1924-25 Cleared	1925-26 Entered	1925-26 Cleared	1926-27 Entered	1926-27 Cleared	1927-28 Entered	1927-28 Cleared	1928-29 Entered	1928-29 Cleared
British	6,066	6,469	5,792	6,160	5,745	6,051	6,185	6,050	6,605	6,521
British Indian	126	147	94	[illegible]	114	127	123	131	122	116
Native	65	63	66	60	57	56	61	61	51	57
Foreign—										
American	290	328	280	300	268	244	249	202	383	276
German	335	268	358	358	394	371	329	510	601	558
Italian	464	512	444	441	461	486	464	479	472	503
Japanese	571	627	627	756	633	725	542	570	558	552
Other nationalities	697	628	641	638	673	634	724	699	775	772
TOTAL ...	8,614	9,042	8,302	8,834	8,345	8,694	8,877	8,702	9,517	9,355

Nationality	1929-30 Entered	1929-30 Cleared	1930-31 Entered	1930-31 Cleared	1931-32 Entered	1931-32 Cleared	1932-33 Entered	1932-33 Cleared	1933-34 Entered	1933-34 Cleared
British	6,433	6,553	5,852	5,651	5,593	5,383	5,349	5,225	4,792	5,044
British Indian	92	85	82	95	80	82	52	62	17	38
Native	50	61	54	63	54	58	49	54	26	49
Foreign--										
American	233	264	159	157	198	184	225	235	223	258
German	673	708	666	680	553	594	420	419	352	435
Italian	590	564	473	475	524	551	598	604	710	722
Japanese	662	639	771	772	599	582	563	591	533	525
Other nationalities	915	862	49	412	766	746	647	615	707	651
TOTAL ...	9,648	9,736	9.006	8,785	8,567	8,185	7,903	7,805	7,360	7,717

Rail-borne Trade at Stations adjacent to land frontier routes of India proper.

(All Quantities in Thousands of Maunds except Treasure)

IMPORTS

Articles	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Grain and Pulse—Wheat	378	346	365	294	276	158	125	364	338
Gram and Pulse	369	476	281	311	256	284	197	422	619
Rice, husked and unhusked	2,395	1,953	2,012	2,569	1,907	2,249	2,238	2,447	687
Other Grains and Pulse	800	704	787	1,176	1,258	587	778	729	379
Hides and Skins	118	174	139	209	171	134	103	97	125
Ghi	78	106	87	93	89	[illegible]	57	60	56
Tobacco	111	133	138	137	139	119	112	137	93
Wool, raw	247	292	318	314	211	108	130	71	174
Carpets and Rugs	18	[illegible]	32	33	31	22	17	20	14
Borax (a)	24	29	25	20	14	15	10	7	9
Charas (b)	1·5	1·4	1·9	2·0	2·3	[illegible]	2·7	2·3	2·0
Jute, raw	230	222	390	383	303	288	[illegible]	208	271
Oilseeds—Linseed	376	580	668	398	583	497	409	446	429
Mustard and Rape	321	390	381	324	282	260	304	356	286
Treasure (in 1,000 ounces)									
Gold	...	...	...	...	...	1·3	...	36	66
Silver	905	2,827	3,513	5,908	4,943	3,275	4,398	6,847	9,796

(a) Imported in appreciable quantities from Tibet.
(b) Charas imported mainly from Central Asia and Turkistan.

Rail-borne Trade at Stations adjacent to land frontier routes of India proper.

(*All Quantities in Thousands of Maunds except Treasure*)

EXPORTS

Articles	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34
Cotton—Twist and Yarn	83	94	66	62	76	79	72	73	66
Piecegoods, foreign	329	379	340	350	258	181	215	200	211
,, Indian	192	236	251	287	246	257	294	295	287
Dyes & dyeing materials, Indigo	...	..	1·2	·9	·9	·7	1·6	1·7	6·7
,, others	...	...	10	25	12	11	27	32	13
Grain and pulse—Wheat	998	1,196	892	1,131	1,544	1,417	1,136	835	1 116
Rice, husked	628	511	480	530	701	649	670	663	697
Others	1,302	1,293	1,433	1,474	1,353	1,164	1,720	1,580	1,404
Iron and Steel—Unwrought	65	37	57	34	53	58	57	26	30
Sections	249	389	403	353	286	343	291	198	307
Machinery and Millwork	29	58	36	65	40	43	52	30	19
Others, including Hardware and Cutlery	62	52	43	54	30	54	29	31	24
Petroleum	191	278	366	331	376	376	392	311	357
Salt	1,367	1,640	1,742	1,844	1,706	1 599	1,740	1,706	1,501
Sugar—Unrefined	164	152	109	102	93	97	72	83	166
Refined	725	852	922	989	939	1,075	771	741	888
Tea	131	146	104	106	105	98	102	104	174
Tobacco	107	108	139	141	131	126	134	112	107
Brass and copper (a)	12	12	13	15	11	8	14	29	16
Betelnuts (a)	21	29	35	37	37	30	39	32	24
Treasure (in 1,000 ounces)—									
Gold	0·5	3·1	0·9	2·0	3·6	25·5	16	2·5	...
Silver	1,526	6,222	3,571	3,378	6,185	8,283	15,151	3,976	2,081

(a) Sent in appreciable quantities to Nepal.

Total tonnage of vessels employed in the Trade of India

(In thousands of Tons)

Year	Foreign trade	Coasting trade
1924-25	17,656	41,584
1925-26	17,136	43,112
1926-27	17,039	43,481
1927-28	17,579	47,873
1928-29	18,872	49,800
1929-30	19,384	52,181
1930-31	17,791	42,026 (Not accurate as Madras figures are not available)
1931-32	16,552	Not available
1932-33	15,708	51,906
1933-34	15,077	45,679

TRADE SECTION:

INTERNAL TRADE

The importance of internal trade has generally been overlooked in all countries for a variety of reasons. There was in the first place, the survival of the old mercantalist notion that the wealth of a country is increased only through its foreign trade. The *laissez faire* economics of the nineteenth and twentieth centuries did little to help a more correct appreciation of the importance of internal trade activity, though it gave a corrective to the crudities of mercantalism. The exaggeration of the importance of foreign trade may be seen from the fact that international trade has been regarded widely as identical with world trade and as the sole index of economic prosperity. With the formulation of national economic policies and the growth of protectionism, internal trade is bound to grow both in volume and in importance. In India foreign trade monopolised the attention of economists for two reasons. Firstly, Government was more interested in foreign trade than internal trade and, therefore, provided more statistics in regard to the former. Secondly, the state of the national economy and the country's indebtedness invested the favourable balance of trade and balance of payments with an unique importance. Now that India, in common with the rest of the world, has taken to the policy of protectionism with a view probably to ultimate economic self-sufficiency, the course of internal trade has to be studied with at least as much care and attention as the foreign trade. It is with a view to facilitate such an important study that we have included as from this year statistics of internal trade in the *Indian Finance Year Book*.

It will be easily seen that internal trade falls into two divisions—coasting trade and rail and river-borne traffic. The statistical data furnished in this section of the *Year Book* require an explanatory note about the basis of compilation.

COASTAL TRADE

The "coastal trade" dealt with in these tables is the trade registered at the British Indian ports, that is to say, the trade of these ports with one another and with Indian ports not British. The figures show generally the trade as declared in the shipping documents duly scrutinised with reports of notices of short arrivals or shipments and passed through the Customs Houses up to the last working day of the month or as near to that date as is practicable. The term "Indian merchandise" comprises all goods that are of the growth, produce or manufacture of India. Indian merchandise is distinguished from Foreign merchandise in the declaration of importers or exporters made in the Bills of Entry or Shipping Bills from which the trade statistics are compiled.

The registration of the coasting trade is done separately (from the foreign sea-borne trade) in the six maritime provinces, namely, Bengal, Bihar and Orissa, Bombay, Sind, Madras and Burma. The total imports into, and the total exports from, each province are divided as follows:--

1. Internal trade, *i.e.*, trade amongst ports within the same province.

   (This includes the trade between a Customs and a non-Customs Provincial port which is registered at a Customs port).

2. External trade, *i.e.*, the trade between one province on the one side and all other provinces *plus* non-British ports in India (*e.g.*, Kathiawar ports, French ports, etc.) on the other.

Passengers' baggage, postal transactions and merchandise transhipped at Customs ports are excluded from the accounts of both imports and exports. Imports and exports of gold and silver coin and bullion, on private or Government account, are recorded separately and are not included in the figures of merchandise. 'Merchandise imported or exported on Government account, however, is outside the scope of these statistics.

Figures of quantities and values are given as declared by importers and exporters in Bills of Entry and Shipping Bills, as subse-

quently checked by the Customs officials. The weight recorded is the net weight, *i.e.*, it does not include the weight of the covers or packing. According to the provisions of the Indian Sea Customs Act, VIII of 1878 (Section 30), the values of goods imported or exported represent:—

(*a*) the wholesale cash price, less trade discount for which goods of the like kind and quality are sold or are capable of being sold at the time and place of importation or exportation, as the case may be, without any abatement or deduction whatever, except (in the case of goods imported) of the amount of the duties payable on the importation thereof; or

(*b*) where such price is not ascertainable, the cost at which goods of the like kind and quality could be delivered at such place without any abatement or deduction, except as aforesaid.

In the foreign sea borne trade, import or export duties are not included in the values recorded, but in the values of articles imported or exported as recorded in the coasting trade, customs and excise duties previously paid are included.

RAIL AND RIVER-BORNE TRADE

The statistics of rail and river-borne trade were published upto the year 1922 but were then discontinued on grounds of economy. The information collected prior to 1922 used to be compiled from quarterly returns furnished by the local governments and they were published in a consolidated form in an annual publication. The publication of these statistics was resumed from the year 1933-34; and it is now essentially on the same basis; but the figures are published monthly and purport to be a summary view of the inland trade of India during each month together with running totals from the beginning of the official year.

The statistics relate to the inland trade of India, carried by the railways and the steamer services, and represent the movement of the trade into and from a province, taken as a whole, or a chief port or ports, the trade of which is registered separately from that of the trade of the province in which such port or ports may be situated. The trade dealt with in these accounts would, therefore, fall into one or other of the following categories:

(*i*) the trade of a province with other provinces,

(*ii*) the trade of a chief port with the province in which it is situated, and

(*iii*) the trade of a chief port with other provinces.

Goods carried from one station to another within the same province or principal trade block are not registered for purposes of these accounts.

Classification of the trade by blocks.—For the purposes of registration of these statistics the country is divided into 18 principal blocks, namely—

(*i*) 9 blocks representing the British provinces—Assam, Bengal, Bihar and Orissa, the United Provinces of Agra and Oudh, the Punjab (including the North West Frontier Province and the Delhi Province), Sind and British Baluchistan, the Central Provinces and Berar, Bombay, and Madras;

(*ii*) 4 representing the principal port towns—Calcutta, Bombay, the Madras seaports, and Karachi; and

(*iii*) 5 representing Indian States—Rajputana, Central India, the Nizam's Territory, Mysore, and Kashmir.

Thus, the trade shown against "Bengal" is the trade of the province of Bengal, excluding Calcutta, the trade of which is shown separately; similarly, the trade credited to "Bombay," to "Sind and British Baluchistan," or to "Madras" exclude the trade of Bombay Port, Karachi or the Madras seaports for which separate figures are given. The rail-borne trade is not registered in Burma. The trade of the Indian States which lie within the external boundaries of a British province is included in the trade of that province.

The table gives a concurrent view of the imports into, and exports from, each of the 18 principal trade blocks of the commodities selected for specification in these accounts. As in inland trade the same commodity would figure once as imports into one trade block and again as exports from another, the necessity for separate tables to show the imports and exports has been dispensed with.

The plan on which the system of registration in force is based is that each of the railways should register its own imports (*i.e.*, such traffic as is received at stations on its line within a particular province or principal trade block from other provinces or blocks) without taking any account of the traffic which is received at such stations *en route* to a destination on a different system, or to a station on the same system situated outside the province or trade block. In order to minimise the number of returns it has been arranged with the major railways that the statistics of imports into stations on the minor railways with which they connect

should also be registered by them. In the case of river-borne trade, the traffic is registered by the agents of the different steamer services concerned:—

(*a*) between Calcutta and
- (1) Assam,
- (2) Bengal, excluding Calcutta,
- (3) Bihar and Orissa,
- (4) the United Provinces;

(*b*) between Assam and
- (1) Bihar and Orissa,
- (2) the United Provinces;

(*c*) between Bengal, excluding Calcutta, and
- (1) Assam,
- (2) Bihar and Orissa,
- (3) the United Provinces; and

(*d*) between Bihar and Orissa and the United Provinces.

The trade carried partly by rail and partly by river, when booked through and carried by steamers running in connection with railways, is to be recorded generally by the railway administration concerned. The inter-provincial trade borne in country boats is not so large as to justify separate arrangements for its registration, and the registration of such traffic would in any case offer serious administrative difficulties.

As the railway and steamer invoices show only the figures of quantity, the statistics offered in these accounts also relate to quantities only. Owing to the great disparity between prices for the same commodity in different parts of the country it is impossible for purposes of these accounts to work out the corresponding figures of value and experience in the past has shown that on whatever basis values are assigned to the quantity figures recorded, these are in most cases liable to make only a very vague approximation to the truth and should more often than not afford no basis for working out a true and correct balance of trade for the different provinces involved. The quantity figures entered in these accounts represent net weights, *i.e.*, the gross actual weights recorded in the invoices *less* certain percentages (varying according to the class of goods involved) which have been taken to represent the weight of packing materials, etc. The net weights so given are in all cases based on figures of quantity which are recorded in the invoices uniformly in standard *maunds* of 82 2/7 lbs.

Coasting Trade of India

Imports of Indian Merchandise

(Value in Thousands of Rs.)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months.)
Coal, Coke and Patent Fuel ...	2,32,84	2,47,82	2,73,72	3,21,80	2,65,33	3,02,09	Details not available	...	1,83,16	1,35,75
Drugs and Medicines ...	24,01	23,58	23,17	19,85	20,06	19,17		...	28,88	21,78
Dyeing and Tanning substances ...	18,86	55,31	39,28	40,77	41,04	36,71		...	51,43	41,00
Fruits and Vegetables ...	2,07,30	2,02,73	2,12,64	2,51,40	2,57,75	2,43,79		...	1,97,12	1,48,90
Grain, Pulse and Flour—Rice ...	15,94,96	20,19,04	14,76,46	19,88,85	23,66,46	11,38,80		...	8,59,38	10,01,20
Wheat ...	29,62	1,70,83	2,13,09	2,13,67	2,49,03	2,03,56		...	2,37,23	1,94,71
Oils, Minerals	9,12,89	10,55,36	10,48,81	11,04,96	9,28,12	11,76,16		...	11,32,78	8,22,94
Salt	89,19	51,26	67,67	69,96	55,75	70,95		...	1,05,14	93,41
Seeds—Essential	50,50	41,74	47,02	55,82	44,87	40,55		...	35,31	34,75
Non-essential—Castor ...	6,59	4,18	3,39	24,25	15,95	9,49		...	5,33	5,64
Groundnut	32,60	16,37	34,12	55,59	36,11	50,91		...	22,55	11,30
Rape and Mustard ...	10,92	13,39	17,03	24,16	22,46	17,76		...	13,20	9,76
Sesamum	35,48	62,75	63,94	63,66	64,49	53,44		...	56,82	26,76
Copra	1,81,81	2,12,98	1,79,24	1,72,36	1,79,10	2,09,19		...	93,55	78,65
Spices	2,84,29	2,96,57	3,95,41	2,26,50	3,17,21	3,12,23		...	2,18,57	1,57,93
Sugar	40,49	37,61	34,89	26,97	19,41	23,98		...	16,74	20,10
Cotton—Raw	12,98,11	14,89,94	11,11,03	9,66,50	9,72,46	7,85,33		...	4,72,64	5,49,69
Manufactures ...	18,16,83	12,47,78	6,53,14	12,12,41	9,90,02	9,26,93		...	15,56,92	11,46,21
Jute Manufactures	5,17,39	6,09,83	3,83,23	5,21,30	5,74,07	4,82,42		...	2,87,65	2,22,68
Tobacco	1,32,68	1,45,10	1,43,51	1,49,15	1,66,88	2,05,11		...	1,32,02	1,24,61
Teakwood	3,01,10	3,41,17	3,33,87	3,30,03	2,83,31	3,07,79		...	1,64,88	1,39,57
All others	20,95,59	19,67,98	27,50,51	22,73,73	20,69,07	22,67,41		...	15,15,95	10,50,96
Total	[illegible]	1,03 [illegible],27	[illegible]5,05,17	1,01,13,69	98,78,90	91,83,77	80,49,00	79,77,69	73,82,25	60,88,30

Coasting Trade of India

Exports of Indian Merchandise

(Value in Thousands of Rs.)

Articles	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months.)
Coal, Coke and Patent fuel ..	1,68,02	1,79,24	2,02,19	2,41,68	1,93,28	2,18,94			1,72,90	1,15,82
Drugs and Medicines ...	14,24	15,70	14,92	17,54	19,55	17,85			21,56	19,45
Dyeing and Tanning substances ...	45,22	45,69	30,40	29,36	28,96	26,91			20,97	18,08
Fruits and Vegetables ...	1,55,22	1,69,44	1,66,11	2,14,43	2,11,63	2,10,18			1,66,79	1,25,57
Grain, Pulse and Flour—Rice ...	15,18,17	18,73,65	14,78,99	19,05,76	19,99,67	16,74,57			10,55,07	10,07,41
Wheat ...	1,40,17	1,84,24	2,38,40	2,25,34	2,53,13	2,16,56			2,38,56	2,01,11
Oils Mineral	7,59,69	7,98,34	8,94,80	10,36,72	9,08,38	9,18,14			14,33,09	13,00,28
Salt	73,29	52,44	[illegible]	65,04	50,11	57,86			48,99	38,61
Seeds—Essential	41,94	[illegible]	[illegible]	63,85	43,14	41,35	Details not available	Ditto.	34,95	33,05
Non-essential—Castor ...	37	5	3	25	15	9			31	63
Groundnut ...	12,55	7,37	18,00	12,97	7,80	17,87			11,39	6,59
Rape and Mustard ...	9,46	11,91	17,68	19,53	19,41	13,37			14,85	10,45
Sesamum	57,53	68,38	72,56	70,76	64,80	56,60			57,53	22,87
Copra	70,61	72,19	92,05	64,21	67,48	1,12,98			48,88	42,05
Spices	2,78,25	2,74,50	3,06,52	2,46,50	2,68,71	2,76,50			1,74,82	1,23,07
Sugar	42,78	37,05	34,52	30,15	20,23	24,27			17,31	20,85
Cotton—Raw	6,71,47	5,01,21	4,31,08	4,32,78	2,35,32	2,90,85			2,85,60	3,92,47
Manufactures	21,05,81	17,32,47	14,52,57	18,04,76	12,94,64	14,45,57			17,35,81	14,01,61
Jute manufactures ...	4,63,83	6,02,69	5,03,37	4,39,05	5,76,42	4,32,53			2,53,01	2,00,11
Tobacco	1,31,52	1,47,99	1,59,37	1,63,38	1,78,32	1,99,17			1,46,26	93,40
Teak Wood	2,97,60	3,17,66	3,16,83	3,25,30	2,81,95	2,92,90			1,81,29	1,54,59
All others	17,27,53	16,48,27	18,32,37	18,53,17	17,91,86	17,23,44			13,55,04	10,79,20
Total ...	87,55,57	87,87,21	83,68,01	92,55,93	85,20,94	82,68,[illegible]0	71,82,00	69,72,92	74,74,98	64,07,20

Coasting Trade of India

Imports of Foreign Merchandise

(*Value in Thousands of Rs.*)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1932-33	1933-34 (11 months.)
Hardware ...	42,25	50,95	52,17	62,01	59,99	62,70	37,83	33,47
Kerosene ...	15,00	17,36	12,45	13,78	9,88	11,18	23,38	18,86
Cotton Manufactures	2,65,04	2,32,11	2,54,37	3,01,04	2,74,56	3,81,34	1,78,03	1,35,16
Tobacco ...	5,10	11,70	11,87	11,84	15,02	8,99	20,30,	2,34
All others ...	5,26,44	5,65,05	5,43,52	4,94,33	4,69,83	5,68,64	4,37,12	4,07,51
Total	8,53,83	8,77,17	8,74,38	8,83,00	8,29,28	10,32,80	6,96,66	5,97,34

The details for the years 1930-31 and 1931-32 are not available. The totals are respectively Rs. 7,35,00,000 and Rs. 6,93,90,000.

Coasting Trade of India

Exports of Foreign Merchandise

(*Value in Thousands of Rs.*)

Articles	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1932-33	1933-34 (11 months.
Hardware ..	51,40	56,07	59,96	66,64	55,05	56,64	44,87	33,13
Kerosene ...	30,54	61,31	35,38	31,32	25,71	27,96	29,41	23,18
Cotton Manufactures	4,48,07	3,77,16	3,74,11	5,26,28	5,17,25	5,66,94	2,35,45	1,59,26
Tobacco ...	13,72	9,42	7,17	9,93	8,52	11,64	8,97	4,69
All others ...	4,67,09	6,55,73	5,85,79	6,21,42	5,13,61	6,01,54	4,81,43	4,73,67
Total ...	10,10,82	11.59,69	10,62,41	12,55,59	11,20,14	12,64,72	8,00,13	6,94,23

Details for the years 1930-31 and 1931-32 are not available. The totals are Rs. 9,41,00,000 and Rs. 8,41,75,000 respectively.

Coasting Trade of India

Total Trade

(Value in Lakhs of Rs.)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months)
Imports of private merchandise—										
Indian	99.64	1,03.14	95,05	1.01,14	98,79	92.07	80.49	79,78	73,82	60,88
Foreign	8,54	8,77	8,74	8.85	8.29	10.93	7.35	6,94	6.97	5,97
Government Stores ...	87	1,05	1.40	1,34	1,27	1.27	1.17	1.14	(*b*)	(*b*)
Total Merchandise	1.09.05	1.12.96	1.05,19	1.11.31	1.08.35	1,03.43	89.01	87.36	80,79	66,35
Imports of Treasure ...	1,72	1,37	3.60	1,48	1,69	1,79	1.52	1.33	1.97	68
Total Imports ...	1.10,77	1,14.33	1,08,79	1.12,79	1.10,04	1,05,22	90.53	89.24	82,76	67,03
Exports of private Merchandise—										
Indian	87,86	87,87	83,68	92,56	85,21	82,69	71.82	69,73	74.75	64,07
Foreign	10,11	11.60	10.62	12,56	11,29	12,65	9.41	8,42	8.00	6,94
Govt. Stores	1,08	1.39	1.23	1,04	99	1.15	97	73	(*b*)	(*b*)
Total Merchandise	99,05	1,00.86	95,53	1,06,16	97.40	96,49	82,20	78,88	82,75	71,01
Treasure	1,72	2.87	2,27	1,51	1,86	1,54	1.43	2,13	1,18	71
Total Exports ...	1,00.77	1,03.73	97,80	1,07,67	99.26	98,03	83,63	81,01	83,93	71,72
Total Trade ...	2,11.54	2,18.06	2,06,59	2,20,46	2.09.30	2.03,25	1.74,16	1.70.49(*a*)	1,66.69	1,38.75

(*a*) Includes total trade of 24 lakhs under Government treasure details for which are not available under 'Bengal.'

(*b*) Figures not available.

Coasting Trade

Total Trade as between Provinces

Value in Lakhs of Rs.

Trade between	1924-25						1925-26						1926-27					
	Madras	Bombay	Burma	Bengal	Sind	Non British	Madras	Bombay	Burma	Bengal	Sind	Non-British	Madras	Bombay	Burma	Bengal	Sind	Non-British
Madras ...	3,61	9,67	10,10	6,47	2,23	75	2,70	9,99	11,93	4,33	2,14	71	2,78	10,07	10,36	5,14	2,09	75
Bombay ...	8,28	3,43	10,74	9,27	16,06	13,51	9,61	3,97	15,61	6,54	12,27	17,34	9,52	4,29	11,93	5,91	11,46	14,51
Burma ...	9,75	9,50	4,09	17,40	77	80	11,40	11,07	4,13	20,87	1,16	71	10,17	9,94	5,06	19,40	1,15	87
Bengal ...	6,07	11,23	16,62	53	75	42	4,54	5,18	18,28	59	80	63	5,07	5,44	18,48	43	81	81
Sind ...	2,37	14,49	1,06	86	6	2,20	2,27	11,17	1,60	89	3	1,93	2,24	10,43	1,40	97	4	1,97
	1927-28						1928-29						1929-30					
Madras ...	3,05	10,30	12,80	5,34	2,19	83	2,68	10,05	12,27	5,32	1,75	70	2,37	11,49	12,32	5,64	2,19	72
Bombay ...	10,47	4,34	12,66	7,48	12,28	11,75	9,06	3,63	11,77	5,69	8,91	16,03	10,07	3,56	11,14	6,44	10,20	13,46
Burma ...	12,82	10,20	4,26	23,25	1,55	1,18	12,35	8,97	4,78	24,92	1,01	1,63	12,04	9,49	4,88	20,15	69	1,70
Bengal ...	5,12	6,06	19,23	41	87	61	4,87	5,60	23,37	29	1,31	82	5,34	5,67	18,60	40	74	1,14
Sind ...	2,35	10,08	1,77	99	3	1,67	1,75	7,72	1,33	1,35	5	1,68	2,27	8,78	1,02	82	3	1,57
	1930-31						1931-32						1932-33					
Madras ...	1,73	9,57	11.15	4.98	2.17	62	1.18	8.56	10.40	4,44	2,60	53	1.36	5,81	9,43	4,74	2,33	54
Bombay ...	8,69	3,10	9.24	5.79	10,23	10.79	8,34	8.65	9.86	8.30	12,65	9.19	7,80	3.91	8,67	9,68	7,02	7,27
Burma ...	9,95	7,03	4.04	15.13	97	1.42	9,24	7.43	2.73	13,46	1,26	1,18	9,81	9,69	3.54	13,52	2,04	1,61
Bengal ...	5,29	5,31	13.96	40	74	88	4.61	6.97	13.75	38	1,55	68	4,52	8,30	11,73	41	1,81	1,06
Sind ...	2,18	9.00	1.69	73	12	1.79	2.37	10.45	1.97	1,60	1	1.44	2.11	7.15	2,01	1,76	1	1,49

Trade between India and Burma—Chief Imports from Burma into India

(Value in Lakhs of Rupees)

Name of Articles		Pre-War Average	War Average	Post-War Average	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months.)
Rice in the husk ...	...	1,54	1.12	86	1.94	1,90	1,62	1,17	94	55	54
Rice not in the husk ...	...	4,18	7.96	10,93	13.37	14,75	12.10	8,28	8,38	6,37	7,95
Pulse ...	...	17	19	64	27	43	50	27	28	32	25
Oils mineral—											
Kerosene ...	...	3,32	3.72	4,10	4.31	4,10	5,29	4,98	5,27	8,42	7,63
Lubricating ...	...	(a)	21†	21	32	34	35	46	50	70	56
Benzine and Petrol ...	...	(a)	46‡	2,01	5.50	4,60	3,27	3.21	2,84	5,34	4,91
Candles ...	...	12	15	18	14	11	9	8	8	8	6
Lac ...	...	3	6	43	25	52	37	4	5	2	8
Wood and Timber—											
Teak Wood ...	...	1,17	1.32	2,39	2,97	2,53	2.65	1,93	1,52	1,63	1,41
Other Timbers ...	...	18	14	28	52	41	41	22	14	16	16
Total	...	10,71	15,33	22,03	29,59	29,69	26,65	20,64	20,00	23,59	23,55

(Quantity in Thousands)

Name of Articles		Pre-War Average	War Average	Post-War Average	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months.)
Rice in the husk ..	(tons)	214	168	93	184	188	173	175	169	110	128
Rice not in the husk ...	(,,)	383	806	709	904	1.060	909	811	1,086	936	1,266
Pulse ...	(,,)	19	19	46	23	32	35	23	33	42	38
Oils, mineral—											
Kerosene ...	(gals)	97,570	110.821	119,290	126,711	110.761	120,571	113,729	120,414	126,397	110,589
Lubricating ...	(,,)	(a)	2.967†	2.160	3,462	3.623	3,693	6.515	7,341	7,465	5,687
Benzine and Petrol ...	(,,)	(a)	4.215‡	14,371	41,636	43.061	52,108	51.101	45,356	46,650	43,406
Candles ...	(lbs)	4,403	5,455	6,237	5,081	3,746	3,159	2,873	2,847	2,752	2,135
Lac ...	...	...	...	(Value only)	...	..	..	...	...	...	...
Wood and Timber—											
Teak Wood	(C. tons)	128	110	166	188	160	169	125	104	126	113
Other Timbers	(,,)	28	20	25	40	31	36	21	16	17	20

(*a*) Included with "Oils—Mineral—other kinds" prior to April, 1915
† Average of 4 years.
‡ Average of 4 years representing "Petrol" only.

Trade between India & Burma—Chief Exports to Burma from India.

(*Quantity in Thousands.*)

Articles		Pre-War Average	War Average	Post-War Average	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months)
Coal	(tons) ...	413	342	370	769	615	703	654	427	341	252
Cotton Twist and Yarn	(lbs) ...	10,395	12,636	18,944	16,798	10,234	13,498	12,430	12,915	12,616	10,958
Cotton piecegoods—											
Grey (unbleached,—											
Indian	(yds.) ...	7,859	8,570	8,619	6,452	7,287	7,905	6,797	17,757	14,664	17,826
Foreign	(„) ...	3,009	3,116	5,496	5,134	4,541	2,356	1,811	2,857	1,629	1,579
White (bleached)											
Indian	(yds.) ...	3,707	5,895	[illegible].485	2,573	3,024	3,625	4,984	5,849	5,595	18,846
Foreign	(„) ...	2,586	3,741	2,003	703	527	310	524	1,293	1,176	754
Coloured, printed or dyed—											
Indian	(yds.) ...	12,199	21,312	18,122	15,859	15,895	13,591	11,249	20,438	22,913	31,266
Foreign	(„) ...	2,333	4,434	5,842	1,274	1,094	756	1,357	2,411	1,985	2,836
Jute bags	(No.) ...	38,948	39,822	40,123	14,408	51,962	48,856	49,030	53,292	41,181	47,800
Betelnuts	(cwts.) ...	311	279	294	267	251	246	272	248	225	205
Tobaco, unmanufactured	(lbs.) ...	21,160	16,452	16,687	15,933	14,477	12,614	10,225	14,014	13,399	10,626
Pulse	(tons.) ...	14	12	15	16	12	12	18	12	13	6
Wheat flour	(tons) ...	16	12	18	29	28	26	28	18	19	18

Value in Lakhs of Rupees.)

Articles		Pre-War Average	War Average	Post-War Average	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34 (11 months)
Coal	...	51	65	1.09	1,40	1,00	1,08	96	68	55	42
Cotton, Twist and Yarn...	...	56	97	2.35	1,17	79	1,01	70	68	65	49
Cotton, piecegoods—											
Grey (unbleached)—											
Indian	...	14	22	37	17	19	20	17	34	28	33
Foreign ...	...	5	9	24	14	12	6	4	6	3	3
White (bleached)—											
Indian ...	...	8	18	25	9	11	12	15	15	14	26
Foreign ...	...	5	13	11	2	2	1	1	4	3	2
Coloured, printed or dyed—											
Indian	...	27	60	95	62	58	53	43	64	70	79
Foreign ...	...	6	20	25	6	5	3	4	10	7	7
Jute bags ...	...	1.19	1.66	1,88	2,33	2,57	2,40	1,86	1,66	1,11	1,28
Betelnuts ...	...	60	56	64	63	60	59	48	43	34	27
Tobacco, unmanufactured	...	58	43	51	44	44	45	33	29	28	21
Pulse	...	20	20	36	34	28	26	30	18	20	8
Wheat flour ...	...	29	27	52	75	69	61	44	26	30	26
Total	...	4.58	6,16	9,52	8,16	7,44	7,35	5,91	5,51	4,68	4,51

Tonnage of vessels engaged in the Coasting Trade of India

(In thousands of Tons)

Provinces	1925-26 Entered	1925-26 Cleared	1926-27 Entered	1926-27 Cleared	1927-28 Entered	1927-28 Cleared	1928-29 Entered	1928-29 Cleared	1929-30 Entered	1929-30 Cleare	1930-31 Entered	1930-31 Cleared	1931-32 Entered	1931-32 Cleared	1932-33 Entered	1932-33 Cleared	1933 34 (11 months) Entered	1933 34 (11 months) Cleared
Madras	7,701	7,758	7,969	8,135	8,819	9,047	9,143	9,414	9,848	9,736	10,300	(a)	...	(a)	10,551	10,894	9,952	10,245
Bombay	3,962	4,419	3,856	4,464	4,084	4,690	4,246	4,556	4,191	4,642	4,134	4,568	...	(a)	4,471	4,504	4,016	4,289
Burma	5,637	5,695	5,316	5,296	5,513	5,645	6,216	6,138	6,432	6,426	6,447	6,387	6,712	6,757	6,042	6,033	4,271	4,156
Bengal	2,936	2,245	3,111	2,476	3,639	3,380	3,784	3,117	4,098	3,592	3,689	3,356	(c) 3,016	(c) 2,709	3,450	3,092	3,198	2,730
Sind	1,471	1,288	1,484	1,384	1,552	1,474	1,566	1,620	1,605	1,611	1,508	1,547	1,533	1,634	1,389	1,480	1,293	1,529
TOTAL ...	21,707	21,405	21,786	21,755	23,637	24,236	24,955	24,845	26,174	26,007	26,168	(b) 15,858		..	25,903	26,003	22,730	22,949

(a) Figures not available separately.

(b) Exclusive of figures for Madras.

(c) Figures for Calcutta Port only.

Volume of Inland Trade of India (1933-34)

River and Rail-borne

(Volume in Thousands of Maunds).

Names of Articles	April	May	June	July	August	September	October	November	December	Nine months ending December
Bones	89	106	112	66	78	68	102	183	274	1,080
Cement	899	998	1,016	952	861	800	1,005	1,130	1,017	8,678
Coal and Coke	29,036	29,249	25,730	27,382	32,394	25,215	25,587	26,718	31,936	253,256
Coffee	20	16	8	6	88	5	7	9	16	176
Cotton, raw	2,196	1,716	1,084	804	418	280	352	1,208	2,596	10,653
Twist & Yarn—(a) Indian ...	171	231	183	181	180	200	214	226	215	1,801
(b) Foreign ...	18	28	21	20	33	24	28	29	22	223
Piece-goods—Indian ...	569	646	592	548	562	785	775	765	727	5,961
Foreign	128	148	126	92	111	149	125	101	117	1,098
Dyes and Tans—Myrobalams ...	271	193	112	109	83	77	66	107	171	1,189
Fruits, dried	336	497	439	620	627	763	1.182	1,109	639	6,211
Glass	98	72	65	67	68	68	68	68	72	646
Grain and Pulse—Rice ...	3,692	4,246	3,403	2,892	3,135	2,817	3,033	3,243	3,538	29,997
Wheat ...	1,726	3,308	2,596	1.798	844	922	1,015	1,484	1,487	15,182
Wheat flour ...	292	337	328	341	429	466	465	485	427	3,569
Others ...	2,773	4,697	3,213	2,416	2,029	2,342	2,413	3,348	3,368	26,603
Hemp, Indian and other fibres (excluding Jute) ...	49	46	50	42	35	33	35	108	94	493
Hides, raw	100	107	91	89	108	109	125	138	146	1,013
Skins, raw	70	93	94	93	85	80	87	87	104	793
Hides and Skins, tanned and leather	47	47	50	52	55	60	65	58	62	495
Jute, raw	1,578	2,645	1,893	1,064	2,181	4,258	5,232	3,794	2,321	24,956
Gunny Bags and cloth	425	450	297	235	203	250	325	451	451	3,088
Iron and Steel Bars, Sheets, etc. ...	2,258	2,650	3,038	2.118	2.647	2,49[illegible]	2.492	2.550	2,602	22,863

Volume of Inland Trade of India—*Contd.*

River and Rail-borne

(Volume in Thousands of Maunds).

Names of Articles	April	May	June	July	August	September	October	November	December	Nine months ending December
Lac and Shellac	49	123	92	102	73	69	114	108	153	882
Manganese Ore	530	990	700	725	687	764	863	1,060	764	7,084
Mica	5	4	9	10	9	7	8	4	4	59
Oilcakes	640	932	754	746	625	720	763	710	762	6,597
Oils—Kerosene	1,161	1,214	1,152	1,179	1,273	1,166	1,304	1,358	1,345	11,169
Vegetable Oils	218	324	273	237	314	331	320	325	368	2,802
Oilseeds—Castor	278	477	303	294	130	57	57	107	104	1,916
Groundnuts	1,189	2,239	1,960	1,272	695	828	614	1,363	1,670	11,809
Linseed	1,032	1,669	1,037	1,703	844	1,028	358	427	404	8,424
Rape and Mustard ...	1,011	1,126	835	506	423	436	431	538	537	5,936
Gingili or Til ...	128	172	139	65	68	125	125	242	383	1,438
Cotton	416	502	291	178	175	210	312	532	977	3,621
Ghee	41	41	41	39	42	54	18	58	80	452
Salt	3,289	3,040	2,639	1,456	1,495	1,782	2,115	2,411	2,258	20,572
Saltpetre	53	38	45	51	43	31	35	32	36	365
Sugar—Refined and Unrefined ...	1,523	1,432	1,139	927	939	1,111	1,058	1,079	1,364	10,656
Gur, râb, etc.	1,209	785	509	355	468	397	413	846	1,612	6,534
Tea	75	157	280	393	456	489	471	470	289	3,013
Tobacco, raw	390	451	420	281	207	212	206	213	206	2,587
Wood and Timber	1,149	1,262	1,112	706	649	515	518	689	1,065	7,700
Wool, raw	37	62	74	69	32	44	57	55	56	497

INDUSTRIAL SECTION:

THE INDIAN TARIFF BOARD

HISTORICAL SKETCH.

The Indian Tariff Board is the natural result of the decision of the Government of India to change the fiscal policy and adopt a policy of Protection to be applied with discrimination. This decision was based on the findings of the Fiscal Commission that the industrial development of India had not been commensurate with the size of the country, its population and its natural resources and that the fullest development must be aimed at by a policy of judicious protection. The Fiscal Commission also laid down the guiding principles of such a policy and recommended that in its application the Government of India should be advised by a Tariff Board consisting of not less than three members conducting their enquiries under conditions of the utmost publicity. The Legislative Assembly accepted these recommendations in a resolution of February 16, 1923. And the Tariff Board was appointed in March, 1923, initially for one year as a measure of cautious experiment, and later on the basis of a biennial renewal. Though the dissenting minute of a minority of the Fiscal Commission recommended that two of the three members of the Board should be elected by the non-official members of the Legislature and there should also be two assessors chosen from the commercial and mercantile community, the constitution of the Tariff Board which consists of three members one of whom is a Government official has been found by experience to be not unsuited to the purpose. There has so far been no demand for any change in the constitution of the Board. And the Tariff Board continued to function till its break-up in July, 1934, after its completion of the iron and steel enquiry.

The procedure in the case of a Tariff Board enquiry is very simple. The industry concerned applies to the Government making a *prima facie* case for protection; and if and when the Government think it fit the application is referred to the Tariff Board for enquiry and report. As recommended by the Fiscal Commission, conditions of the utmost publicity are ensured though, of course, proceedings *in camera* are resorted to, when the evidence tendered is of such a nature that its publication will involve the divulging of trade secrets. The interests concerned and public bodies like the various commercial associations submit their memoranda supplemented, where necessary, by oral evidence. The report is to be submitted to the Government; and on its acceptance by Government, the desired changes are effected by the normal processes of legislation. The Tariff Board is of necessity an advisory body, the final decision resting with the Government and the Legislature.

The first task of the Tariff Board in reference to any application is, as required by the Fiscal Commission, to assure itself that the industry satisfies the fundamental conditions necessary for a grant of Protection, namely, (1) that the industry possesses natural advantages (2) that without the help of protection it is not likely to develop at all or not so rapidly as is desirable and (3) that it will eventually be able to face world competition without protection.

The rationale of the above conditions is obvious. Taken together they mean that, except in the case of industries which are essential for national defence and are therefore outside the pale of ordinary economic considerations, protection should be recommended only if the Board is sure it is not an avoidable or permanent burden on the consumer. This is in consonance with the principles of Free Trade which may be regarded as the permanent economic rule with protection as a mere temporary exception. Every report of the Tariff Board may be deemed to fall into two parts one showing whether the fundamental conditions are satisfied and the other detailing the specific scheme of Protection, and the reasons why the alternative methods are ruled out.

It is appropriate to attempt a short analysis of the work of the Tariff Board during the last nine years. The Board has so far undertaken and accomplished about 50 enquiries. Of these, in only one or two cases has its recommendations failed to meet with the acceptance of the Government. Wire and wire nails, which was one such, subsequently gained the protection it sought. In the other instance of the heavy chemicals industry, the publication of the report was delayed for two years after its submission to Government, after which it was granted tentatively a somewhat grudging measure of protection. In eight instances, the applications were turned down by the Tariff Board; and the Government acquiesced in its decision. In the case of magnesium chloride, coal and printers' ink, it was held that the case for protection was not established, though the latter gained a slight increase in the import duty. Cement failed to procure State help as it was found that what the industry suffered from was not the competition of foreign producers, but a state of overproduction at home, a position which it was for the industry to adjust as soon and as well as possible. The most outstanding instance in this category of rejected applications is that of oil, in which not only were the producing interests unable to establish a case for protection but a certain section of them was found to be unwilling to place the full facts before the Board.

There were four cases in which import duties on raw materials needed for Indian industries were either reduced or removed. In all the other cases, the applications have resulted in the grant of a substantial measure of protection. But the chief beneficiaries of the activities of the Tariff Board have been the cotton mill industry and the iron and steel industry. Latterly, matches, salt and sugar have come in for a substantial help by way of protection. But nearly ten enquiries have been conducted by the Tariff Board in regard to articles which are closely connected with the iron and steel industry. The cotton industry has been referred to it twice, not including the occasion in which the condition and needs of the cotton industry were the subject of an *ad hoc* enquiry by Mr. Hardy, the Collector of Customs. While the help rendered to the cotton industry has been in the shape of an increase in the duty on imported yarn and piece-goods, the iron and steel industry has had all manner of help ranging from a change in the tariff to direct bounties doled out by the State. It would be unnecessary to detail the various steps taken to strengthen the iron and steel industry, as they are given in the table appended to this article.

After the lapse of more than a decade, one feels tempted to take a comprehensive view of the work of the Tariff Board during this period, and to appraise *in toto* the benefits of the regime of discriminative protection and to enquire whether the constitution and functions of the Tariff Board leave any room for improvement. The task of estimating the value of discriminative protection has been attempted now and again both by businessmen interested in particular industries and by disinterested economists. An appreciation of the difficulties of the task and the practical value of its accomplishments to the economic policy of the future would suggest that its importance has been somewhat exaggerated. The virtual death of international trade and the passing of the age of free trade and the well-nigh universal adoption of economic nationalism preclude the possibility of India abandoning discriminating protection after a trial of more than ten years. Broadly speaking, the test of success of a protectionist policy is expansion of productive activity at home and the progress which the protected industries are able to make in the reduction of costs, and the attainments of economies which were mainly to be effected under the shelter of the protectionist duties. If these are the two principle criteria of success one can say confidently that the policy of discriminative protection has been amply justified by its results. For as mentioned already, the chief beneficiaries of the policy of discriminating protection are the cotton mill industry and the iron and steel industry. To this has now to be added sugar because of its being a prime necessity and having an equally important place both in the agricultural and industrial life of the country.

No one can deny that all these three industries have, on the whole, made good use of the advantages conferred on them by the State. The cotton mill industry is much older than the policy of discriminating protection. And one would expect that the additional advantage of protection would enable the industry to outgrow the need for these much sooner than other industries. The charge that the cotton mill industry has shown the utmost inefficiency has been repeatedly made before the Tariff Board and in the press. The 1932 report of the Tariff Board on the cotton mill industry shows clearly that there are numerous mills in the country and particularly in Ahmedabad which can produce goods of high quality and market them successfully in un-aided com-

petition with Lancashire. But for the rapid progress made by the Japanese mills, their low cost of production and, last but not least, their questionable methods of competition, the cotton mill industry would not have to figure as largely in our protectionist programme as it has to. As for the iron and steel industry, the poor measure of protection accorded to the industry has been practically scrapped by the 1934 report of the Tariff Board. Not only have the protective duties been withdrawn in most cases, but the Tariff Board has actually recommended the abolishing of revenue duties to which advantage a national industry is entitled even under a scheme of fanatic free trade. In this instance, the Continental Steel Industry plays about the same part as Japan plays in the case of the cotton mill industry. But it is the considered opinion of the Tariff Board that if the Continental manufacturers would charge fully economic prices for the products then the iron and steel industry would have no reason to fight shy of an open competition with them in the Indian markets. As compared with the British industry the Indian is now believed to be able to forego the advantage of revenue duties. Though the abolition of revenue duties proposed in the Iron and Steel Duties Bill is manifestly unfair to the Indian industry and is not without grave risks to the welfare of the Tata Iron and Steel Company, the findings of the Tariff Board leave no room for doubt that protection in the iron and steel industry has been hundred per cent. successful. The sugar industry has had a short period of intensive protection. Within a year of the inauguration of protection for sugar it was clear that in this instance protection had led to abnormal expansion of sugar industry in India. The sugar technologist of the Government broadcast the view that there had been an almost unhealthy expansion and it was in the interest of the industry to put a curb on such expansion. The Government of India also found that the import duty on sugar comprising as it did, both the protective duty recommended by the Tariff Board and the revenue surcharge, was so effective in checking the imports of sugar from abroad that the Government's expectations of revenue from this source were not realised. So in the last quarter of 1933-34 Sir George Schuster came to the conclusion that in the interest both of the industry and the revenue of the Government, it would be advisable to levy an excise duty on sugar, leaving the net amount of protection at the level recommended by the Board, so that it will be seen that protection has been successful in not only bringing the sugar industry into existence but also in inducing its vast expansion within a very short period. Thus, judged by the record of the big staple industries, discriminative protection has already much to its credit.

There is then the question of the constitution and the function of the Tariff Board. It may be said that though the dissenting minute of a minority of the Fiscal Commission recommended that two of the three members should be elected by the non-officials of the legislature, and that there should also be two assessors chosen from the commercial and mercantile community, the constitution of the Tariff Board, consisting of three members one of whom is a Government official, has been found by experience to be quite suited to the purpose. There has so far been no demand for any change in the constitution of the Board. And as it has functioned for a period of ten years without a break, it has come to be regarded as part of the prominent machinery of Government.

But the complete break-up of the Board after it submitted the iron and steel report suggests a number of interesting questions. The Government themselves would seem to be entertaining different ideas of the constitution of the Board. There has been a widespread demand that the independence and integrity of the Tariff Board should be safeguarded adequately and that some means should be devised for protecting the Tariff Board from the interference of the executive. There is no means of divining what the ideas of the Government are in regard to the reconstruction of the Board. But some attempt may usefully be made to set down the main principles. Considering that the activity of the Tariff Board must before long be part of a general scheme of planned economy, it is necessary to reexamine the functions of the Board. The Fiscal Commission laid down that the duties of the Tariff Board would be, *inter alia*, to investigate the claims of particular industries to protection, to watch the operations of the tariffs and generally to advise the Government and the legislature in carrying out a policy of discriminating protection.

But so far there has been no case of the Tariff Board acting on its own initiative and tendering advice to Government on matters which have not been specifically referred to it. As the conditions of industrial competition are apt to change during the short period for which the Tariff Board may make recommendations, it is only fair that the Board should have the power to watch the working of the measures recommended

by it and to advise the Government to take such action as altered circumstances may require. It is only when the Tariff Board is given such initiative that the executive will come to regard it as an institution which should be above extraneous influences and which should be left to serve the country according to its light.

A recent development in regard to the Tariff Board is of a disquieting kind. It is believed that the attitude of the Government to the Board has so changed that it is regarded almost as a section of the Commerce Department. The treatment meted out to the 1932 cotton report and the extent to which the recent steel report has been accommodative to British interests, seems to suggest that the status of the members of the Tariff Board should be made similar to that of high judicial officers.

TABULAR STATEMENT SHOWING THE WORKING OF THE TARIFF BOARD.

Serial No.	Date of reference.	Personnel.	Subject of Enquiry.	Recommendations by Tariff Board.	Action taken by Government.
1	2	3	4	5	6
1.	July 10, 1923.	*President :* G. Rainy. *Members :* P. P. Ginwala, V. G. Kale.	Steel Industry.	ROLLED STEEL INDUSTRY. Specific duties of varying amount were recommended on different kinds of rolled steel as under— Rs. per ton. Structural shapes, *i.e.*, beams, angles, channels, etc. ... ... 30 Ship, tank and bridge plates ... 30 Common merchant bars and rods ... 40 Light rails (under 30 lbs.) ... 40 Black sheets, whether plain or corrugated ... ... 30 Galvanized sheets, whether plain or corrugated ... ... 45 WROUGHT IRON. Angles, channels ... ... 20 Common bars ... ... 35 A sliding scale of bounties was recommended on the manufacture of medium and heavy rails and fish-plates and the conversion of the existing *ad valorem* duty into a specific duty of Rs. 14 a ton was also advocated. ENGINEERING INDUSTRY. 25 per cent. *ad valorem* duty on fabricated steel generally, but excluding (*a*) steamers, launches, barges, flats, boats and other vessels, and (*b*) all vehicles except colliery tubs and tipping wagons. 25 per cent. *ad valorem* on switches and crossings. Specific duty of Rs. 40 a ton on spikes and tie bars. WAGON BUILDING INDUSTRY. A sliding scale of bounties was recommended subject to a maximum cost of Rs. 7 lakhs to the State.	The Steel Industry (Protection) Act, 1924, was passed at a special session of the Central Legislature embodying all the recommendations of the Tariff Board except the one regarding Agricultural Implements. The Act received the assent of the Governor-General on 13th June, 1924.

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				TINPLATE INDUSTRY. A specific duty of Rs. 60 per ton. WIRE AND WIRE NAIL INDUSTRY. A specific duty of Rs. 60 per ton on all wire except barbed and stranded fencing wire which would continue to be subject to 10 per cent. *ad valorem.* A specific duty of Rs. 60 per ton on wire nails. AGRICULTURAL IMPLEMENTS. The *ad valorem* duty to be raised to 25 per cent. on picks, powrahs or kodalis and hoes. LOCOMOTIVE BUILDING INDUSTRY. Protection not recommended. STEEL CASTINGS. No specific recommendation was made. ENAMELLED WARE INDUSTRY. No recommendation was made.	
2.	Oct. 5, 1923.	*President :* G. Rainy. *Members :* P. P. Ginwala, V. G. Kale.	Sulphur.	The Board recommended that the import duty on all kinds of sulphur be removed.	Duty removed with effect from 9th June, 1924.
3.	April 10, 1924.	Do.	Paper and Paper Pulp Industries.	The Board recommended a specific duty of one anna a lb. on all writing paper and on all printing paper other than newsprint containing 65 per cent. or more of mechanical pulp. They also recommended that Government should assist the industry by an advance of capital to the extent of not more than Rs. 10 lakhs to the India Paper Pulp Company from their own resources or by the guarantee, in respect of both principal and interest, of a public issue of debentures in order that the possibilities of manufacture of	The Bamboo Paper Industry (Protection) Act, 1925, was passed in September embodying the proposals of the Board regarding the duty but not the financial assistance, in lieu of which, the period of protection recommended by the Board was enhanced by 2 years, *i.e.*, from 5 to 7 years.

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				paper by the sulphite process might be fully explored. The Carnatic Paper Mills which intended to make paper from bamboo by the Soda process might also be assisted with capital in the same manner as the India Paper Pulp Company provided the technical advisers of the Government of India were satisfied that the scheme had reasonable prospects of success.	
4.	April 10, 1924.	*President :* G. Rainy. *Members :* P. P. Ginwala, V. G. Kale.	Printer's Ink Industry.	The Board was of the opinion that an increase in the Custom's duty on imported printer's ink from 2½ to 5 per cent. *ad valorem* would meet the case.	Government accepted the proposal.
5.	April 10, 1924.	Do.	Magnesium Chloride Industry.	In the considered opinion of the Board, the claim to protection was not held to be made good.	Government agreed with the Board's conclusion.
6.	April 10, 1924.	Do.	Cement Industry.	The main conclusions of the Tariff Board were— (1) The cement industry in India possessed natural advantages in an abundant supply of all raw materials and was at no disadvantage in regard to labour. (2) Though the consumption of cement in India had grown with great rapidity, it had not kept pace with production which had increased considerably. (3) The price of cement in India was unremunerative which was due entirely to internal competition. (4) The industry was in virtual possession of the up-country market over a large part of India which was small compared to the demand in the ports. (5) Four-fifths of imports came from U. K. Consumers would not purchase Indian cement unless the price was	The Governor-General-in-Council was satisfied that there was no justification for the intervention of Government and therefore did not propose to take any action on the Report.

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				(6) Cement produced in India was generally of very good quality.	
				(7) Notwithstanding the remoteness of the Indian cement works both from coalfields and from the ports, the industry would eventually be able to meet world competition at the ports without special assistance.	
				(8) The difference in price at which Indian cement was likely to displace British was estimated to be Rs. 8 a ton in Bombay and Rs. 12 in Calcutta.	
				(9) It was considered desirable that assistance should take the form of bounties which would be payable on cement consigned to and *via* the four great ports and their adjacent areas.	
				(10) The 15 per cent. *ad valorem* duty should be converted into a specific duty of Rs. 9 and declared prohibitive.	
				(11) Two schemes having different scales of bounties were drawn up, but whichever scheme was adopted, it should not come into force until the Government of India were satisfied that the price of Indian cement in the ports was in such a relation to the price of imported cement that the payment of bounties would not lead to a reduction in the price of Indian cement.	
7.	Oct. 8, 1924.	*President :* G. Rainy. *Members :* P. P. Ginwala, V. G. Kale.	Steel Industry (urgent enquiry).	As a result mainly of a heavy fall in the sterling prices of Continental steel and of the maintenance of exchange in the neighbourhood of 1s. 6d., the Board definitely held that the Steel Industry (Protection) Act had so far failed to achieve its purpose and recommended heavy increases on fabricated articles, which were as follows :	Government accepted the finding of the Board that the protection given by the Act had been insufficient and that further protection was necessary, but in view of the fact that the recent duties had brought in more revenue than was anticipated and also in view of the fact that the imposition of further duties would entail a burden

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				Class of material.	Duty as per 1924 Act	Duty proposed.	on the consumer out of proportion to the benefit derived by the industry, they thought that a bounty of Rs. 20 per ton on 70 per cent. of the total weight of steel ingot subject to a maximum of Rs. 50 lakhs would meet the needs of the case. The bounty was given from 1st October, 1924 to 30th September, 1925. The proposal of Government to grant bounties was warmly approved by the Board.
				UNFABRICATED IRON & STEEL.			
				Steel bars	40	75	
				Iron bars	35	65	
				Steel structural sections	30	65	
				Iron structural sections	20	50	
				Plates	30	55	
				Black sheet	30	52	
				Galvanised sheet	45	78	
				Tinplate	60	104	
				Rails and fish-plates, medium and heavy	14	30	
				Rails and fish-plates, light ...	40	75	
				FABRICATED IRON AND STEEL MISCELLANEOUS.			
				Fabricated structures	25 % *ad valorem.*		25 % *ad valorem.* *plus* Rs. 60 per ton.
				Coal tubs, etc., and built up tubs ...	25 ,, ,,		25 % *ad valorem.* *plus* Rs. 47 per ton.
				Fabricated steel beams, channels, angles, etc.	25 ,, ,,		25 % *ad valorem.* *plus* Rs. 54 per ton.
				Fabricated iron, angles, etc. ...	15 ,, ,,		15 % *ad valorem.* *plus* Rs. 44 per ton.
				Fabricated plates	25 ,, ,,		25 % *ad valorem.* *plus* Rs. 41 per ton.
				Fabricated sheets	15 ,, ,,		15 % *ad valorem.* *plus* Rs. 40 per ton.
				Spikes and tie bars	40 per ton		Rs. 75 per ton.
				Switches and crossings	25 % *ad valorem*		25 % *ad valorem.* *plus* Rs. 35 per ton.
				Wire nails	60 per ton		Rs. 90 per ton.
8.	June 18, 1925.	*President :* G. Rainy. *Members :* J. Matthai.	Steel Industry.	The main recommendations of the Board were as follows:— (1) Payment of a bounty at the rate of Rs. 18 per ton on 70 per cent. of the weight of steel ingots produced in India between 1st October, 1925, and 31st			A Resolution was adopted in the Legislative Assembly in September which provided : (1) a bounty of Rs. 12 per ton on 70 per cent. of the total weight of ingots made in each month: the total amount for the 6 months ending 31st

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				March 1927, subject to a limit of Rs. 90 lakhs.	March, 1926, to be Rs. 18½ lakhs and for the year ending 31st March, 1927, Rs. 41½ lakhs.
				(2) Grant of rebate to the Tinplate Company of the Customs duty paid by them on tin imported for the manufacture of tinplate. (3) Raising of protective duty on imported tinplate from Rs. 60 to Rs. 89 per ton. (4) Protective duty on fabricated steel other than the kinds specified under other heads from 25 to 32½ per cent. *ad valorem.* (5) Protective duty on such component parts of steamers, launches and other vessels for harbour and inland navigation as are made of fabricated steel to remain at 25 per cent. *ad valorem.* (6) Imposition of a duty of 40 per cent. *ad valorem* on tipping wagons, coal tubs and switches and crossings. (7) Amendment of the Steel Industry (Protection) Act to empower the Government of India to sanction the payment of bounties on railway wagons and carriage underframes subject to a maximum limit of Rs. 24 lakhs in 1925-26 and Rs. 20 lakhs in 1926-27. (8) Cessation of payment under section 4 of the Steel Industry Protection Act of bounties on railway wagons with effect from 1st April, 1926. (9) A public announcement to be made of all bounties sanctioned on wagons and underframes.	(2) Bill No. 29 of 1926 amended the Steel Industry (Protection) Act of 1924 and provided for (*a*) bounties to the extent of Rs. 13,60,000 on iron or steel wagons ordered during the financial year commencing on 1st April 1924: (*b*) bounties to the extent of Rs. 19,40,000 on iron or steel wagons and on railway carriage underframes ordered after 31st March 1925 and before the 1st April 1937. Resolution adopted in the Legislative Assembly, 17th February, 1926, was to the effect that supplementary assistance should be given to the tinplate industry in India (*a*) by increasing from Rs. 60 to Rs. 85 per ton the specific protective duty on all steel tinplates and tinned sheets including tin taggers and (*b*) by reducing the duty on tin, block, from 15 per cent. *ad valorem* to a specific duty of Rs. 250 a ton.
				SHIPBUILDING INDUSTRY.	
9.	March 28, 1925.	*President* : G. Rainy. *Members* : P. P. Ginwala, J. Matthai.		The Board recommended that the duty on the fabricated steel parts of ships and other inland vessels should be fixed at 10 per cent. but subject to the proviso that the duty was in no case less than Rs. 35 a ton.	Government accepted this finding of the Tariff Board but postponed legislation in regard to import duty on ships and other vessels for inland and harbour navigation till the results of the Statutory enquiry into iron and

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					steel industry were known. In the meanwhile Government gave exemption to iron and steel in ships and other vessels imported for inland and harbour navigation from so much of the protective duties as was in excess of 10 per cent. *ad valorem* or Rs. 35 per ton whichever was higher. By the Steel Industry (Protection) Act, 1927, this compensation was reduced to Rs. 23 per ton.
10.	March 28, 1925.	*President :* G. Rainy. *Members :* J. Matthai.	Removal of import duty on spelter and enhancement of duty on imported galvanized hardware.	No recommendation was made for the imposition of a protective duty on imported galvanized hardware, but it was suggested that the revenue duty on imported zinc and spelter of all kinds should be removed.	On 3rd July, 1926, Government issued a resolution that the recommendation for removing import duty on spelter should be considered at the time of the next budget and in connection with further protection for Steel industry in 1927. Government accepted the Board's finding in regard to the non-imposition of a protective duty on imported galvanized iron ware.
11.	June 18, 1925.	*President :* G. Rainy. *Members :* P. P. Ginwala, J. Matthai.	Wire and Wire Nail Industry.	The Board had no proposals to make for the grant of supplementary protection, but thought that the handicap under which the industry suffered should be removed. Therefore they suggested that the Wire Company should be permitted to import wire rod subject only to a duty of 10 per cent. until 31st March, 1927. No case was made out for protecting the manufacture of nails as a separate industry using imported materials. Nor should any special concession be given to Messrs. Halley Brothers in respect of their manufacture of hackles.	Government accepted the findings of the Tariff Board.
12.	Sept. 30, 1925.	*President :* G. Rainy. *Members :* P. P. Ginwala, J. Matthai.	Coal Industry.	Majority and Minority Reports—both held that the case for a protective duty on all imported coal was not established. The Minority report, however, was for the imposition of a counter-vailing	The Government of India accepted the unanimous finding of the Board that the case for a protective duty on all imported coal had not been established. They also accepted the finding

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				duty on South African coal, which the majority did not support.	of the majority report that the imposition of a countervailing duty on South African coal was not advisable though justified on facts, reported by the Board.
				ROLLED STEEL INDUSTRY.	
13.	April 3, 1926.	*President :* P. P. Ginwala. *Members :* A. E. Mathias, J. Matthai.	Steel Industry (Statutory enquiry).	After reviewing the policy of protection, the Board expressed the view that the payment of bounties should no longer form part of the scheme of protection. As competition in certain products came almost entirely from U.K. and in others from U.K. and the Continent and as it was probable that the future prices would be fairly stable in the former and not in the latter, two scales of duties were proposed (*i*) basic duties fixed with reference to the price of British steel and applicable to all countries and (*ii*) additional duties based on the margin between British and Continental prices and applicable to non-British steel on the ground that they would best serve the interests of the country from all points of view. Anti-dumping duties were considered to be impracticable. By 1933-34, it was felt that the Indian industry should be able to meet British competition without assistance but not the competition from the Continent. The basic duties should remain in force for the whole period of seven years, whereas the additional duties might be altered according to the needs and requirements of the situation. The scheme of protection was not only adequate for the existing industry but also afforded scope for expansion. The scales of duties recommended involved a distinctly smaller amount of protection, but the low level of duties was justifiable only if the Government arranged to purchase the whole of their requirements of rails so	The Steel Industry (Protection) Act, 1927, was passed extending protection to the industry till 1933-34 and giving power to the Governor-General in Council to increase the duties if protection was rendered ineffective by any change in the price of imported steel. All the Board's recommendations were accepted by Government.

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far as they could be purchased in India.

The Board were strongly of the opinion that power should be taken by the Governor-General in Council to ensure that proper provision for depreciation was made from time to time.

FABRICATED STEEL.

The Board considered it essential in the interest of the Indian industry that railways should encourage the use of Indian structural steel by revising the designs for bridges and other structures so as to permit of the utilization of the maximum amount of steel manufactured in India.

As a result of the recommendations to a certain extent regarding the duties required on rolled steel, it was proposed that in place of the 25 per cent. *ad valorem* duty on fabricated steel, the basic duty should be 17 per cent. *ad valorem* and that an additional duty of Rs. 13 per ton should be imposed on fabricated steel imported from elsewhere than the United Kingdom.

The duties proposed were as follows:—

Product.	Basic Duty. Rs. per ton.	Additional Duty. Rs. per ton.
Rails 30 lbs. per yd. and over ...	13	...
Fishplates for above.	Revenue duty (minimum Rs. 6 per ton)	
Structural sections (including wrought iron)	19	11

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Product.	Basic Duty. Rs. per ton.	Additional Duty. Rs. per ton.
Bar and rod (including wrought iron) spikes and tiebars, rails under 30 lbs. per yard and fishplates for same ...	26	11
Plates ...	20	16
Ordinary sheets ...	35	24
Galvanized sheets ...	38	...
Steel sleepers ...	10	...
Fabricated steel structure ...	17% ad valorem (minimum Rs. 22 per ton.)	13
Coal tubs & tipping wagons	Ditto.	13

TINPLATE INDUSTRY.

The Board recommended a reduction of the duty from Rs. 85 to Rs. 48 per ton.

They were unable to support the claim that varieties of tinplate not manufactured in India should be exempt from the protective duty. From the economic point of view, discrimination in favour of Wales could not be made since it was with Welsh tinplate that the Indian product had mainly to compete.

The period of protection was fixed at seven years.

AGRICULTURAL IMPLEMENTS.

No recommendation was made because the application for protection was withdrawn.

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				WAGONS AND UNDERFRAMES.	
14.	April 3, 1926.	*President :* A. E. Mathias. *Member :* J. Matthai.	Wagon Industry.	Under the stimulus of the bounty scheme which had been in force, the Wagon industry had made great progress and was now in a position to meet a large proportion of the normal demand. As a consequence of the reduction in the cost of raw material but largely of the decrease in costs resulting from large orders for a few standard types of wagons, the wagon manufacturers were able to meet foreign competition with the help of revenue duty only. The restriction in the demand for wagons had put the industy in a difficult position. Until the demand reached a total of 5,000 in terms of C—2 wagons, all orders should be placed in India by competitive tender from Indian manufacturers. COMPONENT PARTS: FORGINGS, STEEL CASTINGS AND SPRING STEEL, BOLTS AND NUTS. (i) *Forgings.* The manufacture of forgings should be regarded at present as merely a process incidental to the construction of wagons and not as a separate industry. When the demand became normal the same duty should be imposed on imported forgings as on wagons and underframes. During the next few years, orders for forgings should continue to be placed in India as far as possible and in comparing Indian with foreign prices an allowance of 2½ per cent. above the revenue duty should be made. (ii) *Steel Castings and Spring Steel.* The annual demand for steel castings was sufficient to permit of an economic output. Therefore the Board considered	Government accepted the findings of the Board.

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				that a good case had been made out for protection.	
				The best and most economical method of extending help to the industry being by means of a bounty, the Board recommended the payment of a bounty of Rs. 2-8-0 per cwt. to the Hukumchand Electric Steel Works on all steel castings for railway wagons, underframes and locomotives, subject to a maximum of Rs. 1,80,000 during the period October 1st, 1927, to September 30th, 1930, no restriction being placed upon the amount to be paid in any one year.	
				The Board had no recommendations to make in respect of spring steel.	
				(iii) Bolts and Nuts.	
				The Board recommended a specific duty of Rs. 2 per cwt. on all bolts and nuts falling under Article 61 of the Statutory Tariff Schedule.	
				III. WIRE AND WIRE NAIL.	
				As wire rod for the manufacture of wire and wire nails would not be produced for another three years, the industry failed to qualify for protection. Therefore, the protective duty on wire and wire nails should be discontinued.	
15.	Oct. 2, 1926.	*President :* P. P. Ginwala. *Members :* A. E. Mathias, J. Matthai.	Match Industry.	Tariff Board recommended the continuance of the duty of Rs. 1-8-0 per gross without limit to the period of duration and that the duty should be made protective. The conditions laid down by the Fiscal Commission were fulfilled.	Government of India accepted the findings of the Board that the Match Industry fulfilled the conditions laid down by the Fiscal Commission. Government agreed with the recommendation of the Tariff Board and imposed by the Match Industry (Protection) Act, 1928, a protective

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					duty of Rs. 1-8-0 per gross on imported matches without any time limit. Government also accepted the finding that in the circumstances no action was called for against the Swedish Match Company on the ground of unfair competition. Government noted the Board's recommendation that, should developments indicate that the Company was acquiring undue control to the detriment of Indian industry, they should take steps to safeguard the industry.
16.	May 26, 1927.	*President :* A. E. Mathias. *Member :* J. Matthai.	Plywood and Tea Chest Industry.	The findings and proposals of the Board were as follows:— All the raw materials for the manufacture of plywood and of tea chests were available in India. The other conditions of the Fiscal Commission were also satisfied. It did not however appear that the manufacture of plywood products other than tea chests required any assistance. Owing to severe competition from imported tea chests, there was a danger of the local factories being forced to suspend manufacture unless assistance was given. The measure of protection considered necessary was 9 annas 10.6 pies which would be subject to slight further adjustment. The present import duty on all plywood articles other than tea chests and rubber boxes should remain unchanged. The duty on fittings of tea chests and rubber boxes and the linings of tea chests should remain unchanged. The import duty on plywood panels and battens of tea chests should be abolished. A specific export duty of 6 annas 6 pies per 100 lbs. of tea exported in foreign chests should be imposed.	Government accepted the findings of the Board, but they were unable to approve that protection should be given by an export duty. They decided to impose a duty of 30% on all forms of plywood and on the battens and corner pieces of plywood chests, and abolish the drawback.

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				Of this sum 4¼ annas per 100 lbs. of tea might be made over to the Indian Cess Committee and the Cess leviable be reduced by 3 annas per 100 lbs. of tea. The period of protection should be fixed at 5 years.	
17.	March 26, 1928.	*President* : P. P. Ginwala. *Members* : A. E. Mathias, J. Matthai.	Oil Industry.	Both the majority and minority reports held that no case for the protection of oil industry was established, and therefore no action was called for.	Government of India agreed with the Board that no action need be taken for the time being.
18.	March 28, 1925.	*President* : P. P. Ginwala. *Member* : J. Matthai.	Manufacture of electric wares and cables.	The tariff proposals of the Board were that the duty on electrolytic copper rod known as "black rod" be removed and that a duty of 5 per cent. be imposed on rubber insulated electrical wires and cables other than those specified in Article 90A.	Government accepted only the proposal regarding the duty on rubber insulated wires and cables.
19.	Do.	*President* : A. E. Mathias. *Member* : J. Matthai.	Tariff equality in respect of the manufacture of camel hair, cotton and canvas ply belting.	COTTON BELTING. The 15 per cent. *ad valorem* duty on imported black proofing should be abolished and a duty of 5 per cent. *ad valorem* should be imposed on imported cotton belting. HAIR BELTING. The 15 per cent. *ad valorem* duty on imported black proofing should be abolished and the duty on imported camel hair yarn should be reduced from 15 per cent. to 6 per cent. *ad valorem* and a duty of 5 per cent. *ad valorem* should be imposed on imported hair belting. CANVAS PLY BELTING. A duty of 5 per cent. *ad valorem* should be imposed on imported ply belting.	Government did not accept the Board's proposal to remove the duty on black proofing, but they agreed that the duty on cotton, camel hair and canvas ply belting should be increased. They also decided that the duty on imported camel hair yarn should be reduced from 15 per cent. to 5 per cent.
20.	Do.	*President* : A. E. Mathias. *Member* : J. Matthai.	Tariff equality in respect of the manufacture of printing type.	The Board recommended that a specific duty of one annas per doz. should be levied on printing type in place of the existing duty of 2½% *ad valorem*.	Government accepted the proposal and made the necessary alterations in the Act.

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21.	March 28, 1925.	*President* : P. P. Ginwala. *Member* : J. Matthai.	Tariff equality in respect of the manufacture of Manila Rope.	On grounds of principle as well as of administrative convenience, the Board thought that there was a good case for removing the duty on manila hemp.	On 8th June, 1929, Government issued a resolution accepting the principle but proposed to give effect to it when financial conditions permitted. In July 1930, a duty of 15% on a Tariff Valuation of Rs. 30 per cwt. on raw hemp was imposed.
22.	May 19, 1927.	*President* : A. E. Mathias. *Member* : J. Matthai.	Changes in the Tariff entries regarding printing paper.	The Board's view was that the percentage of mechanical wood pulp should be calculated on the fibre content of the paper Newsprint and not on the total weight.	Government adopted the Board's view.
23.	Dec. 1, 1930.	Do.	Steel rails.	The Board considered that a price of Rs. 130 per ton of 90 lb. rails was not too high and that an addition of Rs. 7 should be made to the price of Rs. 130 for 115 lb. rails.	Government accepted the recommendations about 90 lb. rails and as regards 115 lb. rails an addition of Rs. 10 over and above the price of 90 lb. rails.
24.	May 15, 1930.	Do.	Tariff equality and protection for railway materials of 8 in number.	The recommendations were that a specific duty of Rs. 2-4-0 should be levied on fishbolts and nuts, ordinary bolts and nuts and dogspikes and a duty of Rs. 2 on rivets and gibs, cotters and keys per cwt. As regards chrome steel switches and crossings and stretcher bars, the exemption provided for in the Statutory Schedule should be removed and they should be made liable to the protective duty. But in regard to bearing plates, no action was called for.	Government accepted the recommendations.
25.	Sept. 30, 1930.	*President* : A. E. Mathias. *Member* : J. Matthai.	Additional protection for galvanized sheets.	It was the opinion of the Board that the Tata Company had made genuine effort to secure the results which were considered feasible. Lack of progress was due to causes beyond the control of the Company, *viz.*, strike and fall in rail orders on which hinged the scheme of protection. Thus the whole balance of the scheme was destroyed and it was of the utmost importance to find a fresh outlet for the ingot steel.	Government accepted the Board's finding and in Jan. 1931, the Assembly passed a resolution recommending the continuance of the duties mentioned in Government resolution up to 31st March, 1930.

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				From that point of view the maintenance of or even an increase in the output of galvanized sheets became a pressing necessity and the Board recommended that the industry should be assisted by the imposition of an additional duty of Rs. 37 per ton under section 2 (1) of the Steel Industry (Protection) Act III of 1927 for the remainder of the protective period.	
26.	March 28, 1925.	*President :* P. P. Ginwala, *Member :* A. E. Mathias. J. Matthai.	Removal of the revenue duty on pig iron.	The Board's conclusion was that no case had been made out upon which they could base any recommendations for the removal of the revenue duty on pig iron. In their opinion, no serious harm would be done to any consumer if the duty was retained until the statutory enquiry in 1933-34.	In their resolution dated 13th June, 1930, Govenment accepted the Board's finding.
27.	June 10, 1926.	*President :* F. Noyce. *Members :* Rai Bahadur Harikissen Kaul, N. S. Subba Rao.	Cotton Textile Industry.	The main conclusions of both the majority and the minority reports were as follows:— The most striking feature in the history of the industry from 1899 to 1922 was the expansion in every direction, especially in weaving. Other important features to be noted are the loss of the export trade to Japan, decreasing dominance of Bombay and increasing share of Japan in the import trade. The depression was felt more in Bombay than elsewhere and therefore the demand for protection was more insistent in that centre. The altered relation between agrarian and general prices since 1920 contributed greatly to the depression. The course of American prices was also equally a contributory factor. The competition of Japanese yarn affected adversely the prices of Indian yarn. In cloths of lower counts, on the other hand, the Indian mills were able to hold their own. The same thing could not	On 7th June, 1927, the Government of India issued a Resolution disagreeing with the recommendation of both the majority and the minority reports about the additional duty. They also rejected the proposal for a bounty on the spinning of finer counts 32s. and higher. And they said they were unable to express any opinion until they had ascertained the views of the local Government and of the Cotton Mill Industry in Bombay on the proposed establishment of combined bleaching, dyeing and printing works. The removal of the import duty on machinery and raw materials of industry having been in accord with the policy of Government, they agreed with the recommendation of the Board that the import duty on cotton textile machinery and mill stores should be remitted for a period of three years. The publication of the above resolution led to strong protests and deputations

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				be said of cloths of counts of 30s. and above. The depreciation of the Japanese exchange stimulated exports from Japan to India and double shift working gave the Japanese industry an advantage of 4 per cent. Conditions of labour in Japan were inferior to those in India; and therefore it was held there was unfair competition between Japan and India. The stabilisation of the rupee at 1s. 6d. at this time rendered the problem presented by the disparity between prices and wages more pronounced. Over-capitalisation accentuated the depression. Difficulties of finance were not a negligible factor. Bombay was under substantial disadvantages as compared with other centres in regard to cost of fuel, power, water, labour, etc., but these appeared to be rather more than off-set by advantages in regard to cost of stores, insurance, office expenses, etc. It was impossible to express a definite opinion as to how far foreign competition was a permanent cause of the depression. Mills with only spinning departments were hit by the prevailing depression more than others. The Board as a whole made many recommendations for improvement in organisation, management and control. The most important unanimous recommendation was that Government should contribute towards the establishment of a combined bleaching, dyeing and printing works in Bombay. In the opinion of the majority though no justification existed for a differential duty against Japan on the ground of depreciated exchange, a moderate amount of protection both for yarn and cloth was necessitated by the labour conditions in Japan. Any additional	to the Viceroy, and the Government modified their decision. The result was the Indian Tariff (Cotton Yarn Amendment) Act 1927, under which a duty of 5% *ad valorem* or 1½ annas a pound whichever was higher was levied on all imported cotton yarn. The industry continued to decline and as a result of Mr. G. S. Hardy's report and Conference with Millowners the Cotton Textile Industry (Protection) Act, 1930, was passed, under which protective duties on a differential basis were imposed on cotton piece-goods for a period of three years.

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				duty on yarn was undesirable from the point of view of the handloom industry.	
				The fact of unfair competition from Japan having been established, the best way of granting protection to the industry was by the imposition of an additional duty of 4% on all cotton manufactures. The question of a differential duty against Japan was considered undesirable.	
				There was no justification for an export duty on cotton.	
				The concession of free entry enjoyed by cotton mill machinery and mill stores prior to 1921 should again be granted.	
				A stimulus to the production of goods of higher quality should be provided in the form of a bounty on the spinning of higher counts, 32s. and over, to the extent of 15 per cent. of the total working spindleage in a mill in British India.	
				The appointment of Trade Commissioners in Basra and Mombasa was pressed.	
				Before the appointment of Trade Commissioner, a commercial mission should make a survey of the potentialities of export markets.	
				No case had been made out for a special treatment of the hosiery industry.	
				While agreeing with most of the recommendations of the majority, the President (Mr. Noyce) was of the opinion that there should be no bounty on the spinning of higher counts.	
				He also was of the opinion that the fact of unfair competition having been proved against Japan, the additional duty of 4 per cent. which was what was required in the shape of protection should be imposed only on cotton piece-goods coming from Japan.	

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28.	July 25, 1932.	*President :* Dr. Matthai. *Members :* F. I. Rahimtoola, G. T. Boag.	Cotton Industry.	The Board recommended that Government should immediately examine the possibility of using their powers under Section 3 (2) of the Tariff Act in the case of piecegoods imported from a country with a depreciated exchange to raise the value of the goods for Customs purposes in such proportion as to secure the continuance of the protection intended for the Indian Industry. If this was not accepted, then the necessary additional assistance should be provided by raising the *ad valorem* duty on all cotton piecegoods of non-British origin from 31¼ per cent. to 50 per cent. in view of the Indo-Japanese Trade Convention in existence. No proposal was made regarding the specific duty on plain grey goods because it was thought that Section 3 (5) of the Tariff Act restricted the power of the Governor-General.	Government accepted the Board's recommendation in respect of the *ad valorem* duty on cotton piecegoods not of British manufacture. As regards the specific duty, Government decided that the Governor-General in Council had power to alter the duty and raised accordingly the duty from 3½ annas to 5¼ annas per lb.
29.	April 9, 1932.	*President :* J. Matthai. *Members :* F. I. Rahimtoola, G. T. Boag.	Cotton Industry.	The Tariff Board found an increase in the number of mills at work in India as also in the production of both yarn and piecegoods. The decline in the imports of yarn and piecegoods of all descriptions was also noticeable. There was a serious falling off in the export trade in coloured goods since 1926-27. The claim to substantive protection of an industry must be judged both by the conditions laid down by the Fiscal Commission and by the national importance of the industry. India had a virtual monopoly of short staple cotton and also produced enough long staple cotton to meet the country's requirements. Majority of mills in India would find it impossible, without protection, to realise any return on capital or to find adequate sums for depreciation and in many cases	On February 10, 1934, a Bill for amending the Cotton Textile Industry (Protection) Act, 1930, was introduced. The Government of India agreed with the Board's conclusion that the Cotton Textile Industry had established a claim to substantive protection; but they found it necessary to review the measures of protection in the light of events subsequent to the submission of the report by the Board. The denunciation of the Indo-Japanese Trade Convention and the subsequent conclusion of a new trade agreement with Japan together with the unofficial agreement between representatives of the Indian and United Kingdom Textile Industry had introduced entirely new factors into the situation. The Bill was intended to give statutory effect to the aforementioned agreements. Opportunity was also taken by Government to in-

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				even to meet the whole of their out of pocket expenses. Continued depression of the industry in Bombay was bound to depress prices throughout the country. The introduction of protective duties on piecegoods in 1930 prevented a greater fall in their prices than the fall in the prices of raw cotton. The reduction of purchasing power diverted the demand from high priced to low priced goods. The withdrawal of protection would cause a serious set back to the industry. The only practicable method of fixing the measure of protection was to base it on the difference between the fair-selling price and the price actually realised by the Indian mill. Effective protection could only be given by specific duties. Any system of specific duties should be based on as broad a classification as possible. It would be unnecessary to have more classes than four, (1) plain grey, (2) bordered grey, (3) bleached, (4) printed, dyed and coloured woven with duties of 5 annas, 5 annas 3 pies, 6 annas and 6 annas 4 pies per lb., respectively or the *ad valorem* rate of revenue duty whichever was higher. The *ad valorem* duty was intended to protect the revenue of Government. The specific duties proposed would be applicable to cotton goods of British and non-British manufacture. A reduction of the specific duty on yarn to one anna a pound and its restriction to counts 50s. and below was recommended. The claim to protection of subsidiary industries such as hosiery industry and braid-making industry was analogous with that of the engineering and other industries whose raw material is rolled steel.	corporate into the Bill their decisions on the recommendations of the Board on the Sericultural industry.

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				The Board recommended that protection be given by (1) a specific duty of Re. 1-8-0 a dozen on under-wear including knitted garments of all descriptions and underwear made from woven fabrics; (2) by a specific duty of 8 annas a dozen pairs on socks and stockings; (3) by a specific duty of 6 annas a pound on knitted fabrics in the piece and (4) by a specific duty of 6½ annas a pound on braids known as "Ghoonsis" or "Muktakesis."	
				Piecegoods made entirely or in part of artificial silk should be subject to a specific duty of Re. 1-8-0 a lb. But if the proportion of artificial silk in the mixture did not exceed 15 per cent. of the total weight, the goods should be assessed as coloured cotton piecegoods or wollen manufactures.	
				A duty of 15 per cent. should be imposed on all imported starch.	
				It was considered desirable that the Merchandise Marks Act should be amended without delay so as to penalise dishonest practices.	
				Legislation was desirable in order to define the extent and nature of the control and supervision to be exercised by the directors and shareholders over managing agents. A Committee should be appointed to report on the manner in which the Company Law skould be amended.	
30.	Dec. 3, 1932.	*President :* F. I. Rahimtoola *Members :* G. T. Boag, H. R. Batheja.	Sericultural Industry.	The Board recommended an *ad valorem* duty of 80 per cent. on silk goods and 60 per cent. on silk mixtures. They also recommended that all silk yarns including thrown silk and spun silk be liable to the duty recommended for raw silk, and that a specific duty of Re. 1 a pound be levied on artificial silk yarn.	Government action was embodied in the Textile Industry (Protection) Act, 1934.

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31	May 20, 1930.	*President :* A. E. Matthias. *Members :* J. Matthai, F. I. Rahimtoola	Sugar Industry.	The Board was satisfied that the three conditions laid down by the Fiscal Commission were fulfilled by the Sugar Industry and that a case for protection had been established. The agricultural aspect of the case for protection was the most important. In the national interests, the area under sugar-cane should not diminish and a fresh outlet should be provided for cane by encouraging the expansion of the white sugar industry. Unless steps were taken to develop the white sugar industry, the Board was of opinion a disastrous slump in the gur market was probable which would seriously affect the agricultural classes, disorganise the agricultural system and involve the abandonment of better cane cultivation in large areas. The khandsari system of sugar manufacture was of great importance in the Rohilkhand tract. Both from the point of view of outlet for cane and from the point of view of the position of cultivators in Rohilkhand, the continuance of this branch of industry must be secured. The area under cane in India over a series of years had remained very steady. The main product of sugarcane in India was gur, of which between 2½ and 3 million tons were consumed annually. There were as many as 29 factories capable of manufacturing white sugar direct from cane and there were also 14 refineries which manufactured white sugar mainly from gur. There was a remarkable increase in the efficiency of extraction of Indian factories since 1920. Much progress was made in the last ten years at the Sugar Research Station at Coimbatore and a number of varieties had been evolved which were particularly suitable for Northern India.	The Government of India accepted the recommendation of the Board that a single rate of duty should apply to all classes of sugar. As the period of 15 years was considered to be unduly long, it was decided to propose that a protective duty of Rs. 7-4-0 per cwt. be imposed on all classes of sugar until 31st of March, 1938, and that provision be made in the statute for a further enquiry before the end of that period. The Government did not propose to accept the Board's recommendation that power should be taken to impose an additional duty in the event of the price of imported sugar falling below a certain level. The Board's recommendation regarding the duty on molasses was accepted. A resolution embodying the above decisions of Government was issued on 30th January, 1932, and the Sugar Industry Protection Act received the assent of the Governor-General on 8th April, 1932.

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				Steps should be taken to reduce the cost of production of gur particularly in Bombay and Madras by the improvement of methods of cultivation and by the introduction of improved varieties of cane after investigation at the Research Station at Coimbatore. Sugarcane was the only important agricultural product, the price of which was not determined by world conditions and Government had it in their power at this time of severe agricultural depression to afford substantial assistance to the agricultural classes by protecting the sugar industry. Any scheme of bounties was on administrative grounds impracticable. The Board therefore proposed that assistance should be by way of duty. In order to enable the industry to face initial difficulties and to safeguard the position of the manufacturer of indigenous sugar by the bel method, the Board recommended that for the first seven years the duty should be fixed at Rs. 7-4-0 per cwt. and that for the next eight years at Rs. 6-4-0 per cwt., the period of protection being for 15 years. The Board also proposed that a single rate of duty should be applied to all classes of sugar including sugarcandy. They had no recommendations to make regarding the application of Messrs. Carew & Co. for the removal of tariff inequality on methylated spirit. Protection was unlikely to affect seriously the industries using sugar. Increased sums should be allotted to development and research work since without such measures the whole purpose of the protective scheme was likely to be delayed, if not defeated. They recommended a grant of not less than Rs. 10 lakhs annually to the Imperial Council of Agricultural Research.	

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				The Tariff Board considered the scale for cane payment recommended by the Indian Sugar Committee, *viz.*, a sliding scale based on price for cane equal to half the price of sugar subject to a minimum of 6 annas per maund as generally suitable, but they thought that it should be increased by one anna per maund in the first years of protection.	
32.	July 25, 1929.	*President :* Sir P. P. Ginwala up to 26-3-30. A. E. Mathias from 27th March, 1930. *Members :* A. E. Mathias up to 26-3-30. Dr. J. Matthai.	Salt Industry.	Tariff Board held that it would be necessary to increase the duty from Re. 1-4-0 to Re. 1-6-0 per maund to bring the import price of Rs. 53 to the level of the fair selling price of Rs. 66 for the Indian industry. This would involve an additional burden of nearly Rs. 20 lakhs on the Bengal consumer. Considering the limited extent to which the national interests would be served by the establishment of salt industry at Okha or Karachi, to expect the Bengal consumer to shoulder a burden of this magnitude would be entirely unreasonable, but a different conclusion might be reached if there was a reasonable prospect of securing stability of price. On economic grounds the case for the imposition of a protective duty could not be sustained. Nor could the proposal for any remission of the excise duty be justified. Maintenance of quality could not be guaranteed either by the imposition of duty or by the grant of bounty. Their conclusion was that it was not in the national interests to encourage the production of Indian seaborne salt at anything more than a price of Rs. 66 per	The Government of India accepted the finding of the Board and appointed a Salt Survey Committee. After considering that report the Salt (Additional Import Duty) Act 1931 was passed and it received the assent of the Governor-General on 5th April 1931. An additional duty of 4 annas 6 pies per maund was imposed under that Act on all salt imported into British India but produced outside India.

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				100 maunds and the only method of encouragement which could be recommended was stabilization of prices over a long period by some form of organized control.	
				The Board held that India could be made self-supporting in respect of salt. Khewra and Sambher provided sources of supply of white crushed salt for the Bengal market. Therefore, they recommended that a detailed survey should be made of these possible sources.	
				As in the case of seaborne salt, so in the case of rail borne salt, they thought, if the manufacture of white crushed salt was to be encouraged in India, the only ultimate solution was the introduction of some form of organised control.	
				The advantages of such a control were many. In the first place, the Indian manufacturer would get a reasonable price which would also be fair to the consumer. In the second place, exploitation by combines of foreign manufacturers could be stopped. In the third place, Government would have an additional source of supply to make good shortages in Upper India.	
				The control must ultimately be in the hands of a Marketing Board constituted on the lines of a public utility company. But Government should at once assume control of imported salt in the interests of the industry as well as the consumer and standardise the qualities of common crushed and superfine salt.	

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33	16th July, 1928.	*President :* P. P. Ginwala. *Members :* A. E. Mathias. J. Matthai.	Heavy Chemicals Industry.	The Tariff Board took the sulphuric (Chamber) acid as the basis of the whole group of chemicals considered in their report. The heavy sea freight on acids afforded a high natural protection to the manufacture of sulphuric, hydro-chloric and nitric acids locally, but as there was no freight advantage in respect of salts, their manufacture in competition with other highly developed countries was difficult. The market in the country was sufficiently big to warrant production on an economic scale. The machinery required was simple and easily handled by Indian labour. In respect of raw materials, though India possessed several of those required, sulphur which was the most important raw material was lacking, but its absence was not considered a bar to the grant of protection. The chemical industry was a key industry and one of national importance and therefore the Board considered that the industry should be protected. At the moment, the production being on a small scale, the costs were high and could not be accepted as a suitable basis for protection. The industry should reorganise itself and attain bigger production so as to bring down the cost of production. The protection required should be given in the form of specific duties which represented substantially the present level of revenue duties. The inter-connection of the various duties suggested was emphasised. No limit was fixed to the period of protection, but another enquiry should be made after 7 years. Realising the close connection between the chemical industry and the manufacture of artificial fertilisers, the Board held that the manufacture of superphosphate	In a resolution issued on 5th September, 1931, the Government of India proposed to give effect to the protective duties recommended by the Board for the period up to 31st March, 1933. They did not agree with the Board in the matter of railway rating policy. They also thought that the question of assisting an industry not yet in existence by means of a bounty required further consideration. In the same resolution the Government of India said that they were prepared to discuss with representatives of the Chemical industry the question of developing the industry. Again in a resolution issued on the 1st April, 1933, summarising the position of the industry, the Government of India said that there was no indication of any intention on the part of chemical manufacturers to work for more economic production by a combination of interests; that the great majority of opinions were unfavourable to any scheme of State assistance for the manufacture of superphosphate and that there was no chance at any time of the superphosphate industry, if started, being able to stand competition from other countries unassisted. The Government of India therefore finally decided not to place any proposals before the Legislature for the continuance of protection of the Heavy Chemical Industry. The protective duty on magnesium chloride however would remain unaffected till March, 1939.

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				was a suitable industry for the grant of protection, which should take the form of a bounty. On a careful examination of the question the Board found that a policy of reduction of railway freights with a view to facilitate the formation of a combine would be not merely in the national interests but also in the interests of railways themselves.	
34.	16th July, 1928.	*President:* P. P. Ginwala. *Members:* A. E. Mathias. J. Matthai.	Magnesium Chloride Industry.	The Board recommended the imposition of a specific duty of 7 annas a cwt. for 7 years.	The Government of India accepted the recommendation and imposed the duty in 1931.
	26th March, 1931.	*President:* J. Matthai. *Members:* F. I. Rahimtoola. G. T. Boag.	Paper and Paper Pulp Industries.	The main recommendations made by the Board were as follows: (1) Protection to the bamboo paper and pulp industry should be continued by means of a duty. (2) The duty on imported paper should be imposed at the same rate and on the same articles as at present. (3) A duty should be imposed on imported wood pulp at the rate of Rs. 45 per ton. (4) The protective duties on paper and pulp should remain in force for a period of seven years from the 1st April, 1932. (5) A conference should be held with representatives of the different interests to decide the proper definition of the classes of paper to be subject to the protective duty. (6) Compliance by the paper-making companies with the principles stated in para. 292 of the Fiscal Commission's report should be made a condition precedent to the grant of concessions for the exploitation of forests and to purchases of paper by Government.	Government accepted the proposals of the Board regarding the duties to be imposed on various kinds of paper and also on pulp. The period of protection fixed by the Board was also approved. The Conference proposal made by the Board for the definition of articles chargeable with protective duty did not receive the assent of Government. The conditions laid down in paragraph 292 of the Fiscal Commission's report would, it was explained by Government, apply only to new companies and not to companies already in existence at the time of the consideration of the question of granting assistance. The Bamboo Paper Industry (Protection) Act was passed in 1932.

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				(7) The Paper Pulp Section of the Forest Research Institute should be developed and should undertake co-ordination of experimental work on bamboo.	
36.	15th May, 1930.	*President:* A. E. Mathias. *Member:* J. Matthai.	Gold Thread Industry.	The Board considered that a case had been made out for the protection of the gold thread industry and recommended that the duty should be fixed at 50 per cent. *ad valorem* applying alike to real gold thread, lametta, manufactures from silver wire such as spirals, spangles, etc., and all colourable imitations. They also recommended the period of protection to be fixed at 10 years.	The Government accepted the findings of the Board and the Gold Thread Industry (Protection) Act came into force in 1931. The duty applicable to the various articles mentioned by the Board was 62½ per cent. *ad valorem.*
37	7th May, 1931.	*President:* J. Matthai. *Members:* F. I. Rahimtoola. G. T. Boag.	Wire and Wire Nail Industry.	The Board recommended a specific duty of Rs. 45 per ton on wire as well as wire nails. They also considered that the existing arrangements for exempting wire rod from duty should be continued.	Government accepted the finding of the Tariff Board and imposed a duty of Rs. 45 per ton by the Wire and Wire Nail Industry (Protection) Act, 1932.
38.	11th May, 1931.	*President:* J. Matthai. *Members:* F. I. Rahimtoola. G. T. Boag.	Electric Wires and Cables industry.	The Board found that the industry did not satisfy the conditions laid down by the Fiscal Commission and therefore had no recommendations to make, regarding the application for protection submitted by the Indian Cable Company.	Government accepted the finding of the Board.
39.	11th May, 1931.	*President:* J. Matthai. *Members:* F. I. Rahimtoola. G. T. Boag.	Glass Industry.	Report of the Board submitted to Government in the beginning of 1932 not yet published.	
40.	26th August, 1933.	*President:* J. Matthai. *Members:* G. Wiles. G. A. Natesan.	Steel Industry.	Board's report under the consideration of Government.	

INDUSTRIAL SECTION:

THE PAINT INDUSTRY

The first Paint Factory in India was erected in 1902 by the Shalimar Paint, Colour & Varnish Co., Ltd. on the banks of the Hooghly between 7 and 8 miles from Calcutta. Since the enterprise was undertaken by this now well known firm some ten or more factories have been opened, so that the paint industry now plays a very important part in the industrial activity of India.

It took many years to break down the very strong prejudice which existed against Indian-made paints ; in fact, the prejudice is still discernible to-day in some quarters ; but it is now entirely without justification. The pioneer factory referred to above is fully equipped with modern machinery and with the assistance of a large staff of experts—both Indian and European—compares most favourably with up-to-date factories in Europe and America. The younger factories have followed suit ; and many of them are to-day able to produce paints, varnishes, enamels, distempers and dry colours of high quality. The oldest and biggest of the Indian paint factories employs over 700 Indian operators, with over 3,000 dependents and provides a self-contained colony with School, Mosque, Hospital with free medical attention, Post Office and suitable habitations for each class of labour, which alone is an indication of the importance and efficiency of this young industry.

The Army Department, Railways and Government departments have for some years past drawn a large percentage of their requirements from the Indian factories through the Indian Stores Department. Most of the materials they consume, consisting of stiff and ready mixed paints, colours, varnishes and enamels, are purchased to standard specifications and before supply are analysed at the Government Test House, Alipore. There are, however, signs of preference being shown for paints, etc., of proved performance, which do not necessarily comply with any standard specification ; and it is being slowly appreciated that it is not possible to devise specifications which are capable of embodying in the resulting paint, varnish or enamel all the special characteristics required to meet varying conditions, such as resistance to weather, obliterating power, covering capacity, length of life, retention of colour and gloss, etc. Non-specification materials, before they are accepted by the Railways and other critical consumers, must first pass the most exhaustive tests under practical working conditions and can only be produced by manufacturers who have set for themselves a high standard of quality and who have the requisite knowledge, experience and manufacturing facilities. In addition, therefore, to the analytical testing of paints, etc., to standard specifications, the Government Test House also conducts periodical exposure tests of non-specification materials to ensure only the purchase of materials which satisfy every requirement as regards behaviour under practical conditions.

So far as is possible, the Indian factories use only indigenous raw materials in the manufacture of their products and these include linseed oil, turpentine, white lead, red oxides, ochres and barium sulphate.

Indianisation is being adopted, so far as is practicable ; and many Indians have filled responsible posts both in the factories and on the sales staffs.

Statistics are available, which show that very large quantities of paints, colours and varnishes are still being imported into India. This should not be taken as an indication that the existing Indian factories are unable to cope with the demand, but rather that in several factories insufficient detail is paid to the quality of the materials produced. The manufacture of paints of low quality requires only indifferent plant and machinery and very little skill ; with the result that production in the lower grades exceeds demand, and excessive competition exists to-day among the smaller factories. The production of low grade paints, etc., is, therefore, unprofitable and any increase in the number of small paint factories in India working without modern plant on the production of low quality materials can only become a drag upon the industry as a whole and will in no way assist to reduce the tonnage which finds its way into India from other countries.

INDUSTRIAL SECTION:

INDIA'S MINERAL INDUSTRY

Modern civilization depends essentially on the utilization of machinery and in advanced technique in the winning and fabrication of natural products. Of these, minerals occupy the most important place in the arts of Peace and War. Even in some of the industries not directly concerned with minerals, they enter at some stage of the manufacture, or marketing and distribution.

India was famous in the eastern Mediterranean countries even before the Christian Era, not only for the gold, diamonds which constituted the wealth of India but for her steel. The 'wootz' steel, mainly of South Indian origin, was world-renowned and was sought after as the best steel for the making of sword blades. Her artisans had learnt the art of extracting of gold, silver, iron, copper and zinc before the West acquired a systematic knowledge of them. But since the industrial revolution in Europe, she has been mainly the producer of raw materials which feed the industries of foreign lands. An examination of her resources in and production of minerals, which will be dealt with in this article, will reveal the fact that she possesses many important materials which, if used judiciously, will place her in the front rank of modern industrial nations.

Among the most important assets of an industrial nation the sources of power production occupy the first place. These include coal, oil and resources for the production of cheap electricity. India's annual output of coal is of the order of 22 to 23 million tons, and but for the present depression, this should have been higher. In the British Empire, she ranks next to the United Kingdom in her coal resources and production though the ordinary man might be misled by successful South African competition in the Bombay market. India's probable coal reserves have been estimated by competent authorities at 60,000 million tons within workable depths, of which about 7,000 million tons have definitely been proved. A fourth of this latter figure is of coking quality and fit for use in metallurgy. The coalfields of Tertiary age, mainly confined to Assam, are estimated to hold some 600 million tons, generally low in ash and of good coking properties, but unfortunately rather high in sulphur in some cases. From this it will be seen that by far the greater part of our coal is of second grade, but with the coal-washing and other processes of beneficiation now being rapidly developed in other countries, a good deal of this will be available for purposes for which it is at present unsuitable.

It is a well-known and deplorable fact that a good deal of coal of metallurgical quality is being used in India for ordinary steam-raising purposes. Very little coal-gas is used and only recently has a start been made on by-product recovery while making coke. A chemical industry for the manufacture of the wonderful variety of substances which coal is capable of yielding is still to develop in India.

With regard to petroleum, the present production of India, chiefly Burma, is only a hundred and fiftieth part of the world's total production. Yet India happens to be the chief country in the British Empire for this commodity. Britain has controlling interest in the oil-fields of several countries of the world, but in a crisis, she has to depend mainly on India. The Burma oil-fields are the most important but a small quantity is also produced in Assam and the Punjab. Yenaungyaung has obviously passed its peak and is rapidly giving place to the Singu field. The probable areas are by now fairly well known; but there are still possibilities amidst these. There are also deposits of oil shales which are potentially of great importance, like the ones of the Amherst district of Burma. At a later stage, when the oil wells cannot produce appreciable quantities by the ordinary methods of recovery, mining may be resorted to.

Turning now to the iron and steel making

materials, it is now known that India has enormous resources in high grade hematite. In southern Singhbhum and the adjoining Orissa States of Keonjhar and Bonai there are hills of solid ore of a high purity having a metal content of well over 60 per cent. It is on these that the smelting furnaces of Tatas, Bengal Iron and Indian Iron & Steel are being fed. A very conservative estimate, the result evidently of a purely exploratory survey, has revealed quantities of the order of 3,000 million tons of high grade ore alone. Further and detailed prospecting can be confidently expected to raise this to a higher figure. There are also deposits on the borders of Orissa and the C. P., in some parts of the C. P., in the Salem district of Madras and in the Mysore State. The total of our iron ore reserves may, therefore, be said to be not much short of 10,000 million tons. India thus ranks, from the point of view of reserves, with the U.S.A. With the development of subsidiary industries, there is great scope for the expansion of India's iron and steel manufacture, not only for supplying the entire needs of the local market but also surplus for export. The Orissa deposits are fortunately situated within easy reach of the coal fields. But Madras and Mysore find it difficult to get supplies of coal. The Bhadravati iron works are now smelting by means of charcoal. The Salem ores lie entirely unused, though the quantity available is known to be enormous. Perhaps with the development of cheap electric power and advancement in the technique of smelting by electricity, an industry may be expected to flourish in that region in the near future. The magnitude of the market in India for iron and steel products can be guaged from the fact that the annual imports of these amounted to over Rs. 50 crores during the last decade.

A good proportion of the ores of Orissa are of powdery nature, and of exceptional purity. If these are not to be wasted, some process of sintering or briquetting will have to be adopted, or some new method of smelting them developed. There are also other problems connected with this, for example, the insufficiency of coking coal reserves. But with advancing technical skill and well-organised research, it should be possible to surmount the difficulties.

India is also a very important producer of manganese ore ; and in this she shares the first place with Russia. Brazil, the Gold Coast, and, latterly, South Africa are also important producers of this commodity. In 1927 the total Indian production reached the record figure of over 1,129,000 tons, but it has been rapidly declining since then. The competition from the Soviet as well as the general heavy slump in the steel industry of the world have operated towards the heavy decline in prices, which does not permit of most of the Indian deposits being worked remuneratively. Since most of the deposits are situated in the Central Provinces, railway freight is a considerable item in the cost.

The Indian ore is mainly exported, but a small quantity, which shows a tendency to increase gradually, is being used for the manufacture of pig-iron as well as steel. Some ferro-manganese is also produced. Since manganese is intimately bound up with the steel industry, its mining will closely follow the vicissitudes of the latter.

Chromite is another of India's important minerals. It is chiefly produced in Baluchistan, Mysore and in the Singhbhum district of Chota Nagpur. A small quantity is used in the preparation of chromite refractory bricks in India, but the greater part is exported. There is a great scope for its use in this country in the manufacture of the stainless steels and in the chemical industry.

Wolfram, which Lower Burma produces, is an important constituent of some of the special steels. Its presence in steels imparts hardness even at fairly high temperatures, so that the tool steels containing it have the property of retaining their hardness and sharpness at temperatures where ordinary steels soften. During the War the Burmese deposits were of immense use to the Allies ; and they were specially developed to meet their demands. China, however, has extensive deposits of this mineral and is a serious competitor.

Of other minerals which enter the steel industry, beryl has come into prominence in recent years. This mineral is a frequent associate of mica in the pegmatitic rocks of Bihar, Nellore and Rajputana. A few tons have been produced recently in Rajputana. It can be won as a by-product of the mica industry in the other areas also. Vanadium-bearing minerals do not seem to have been reported as occurring in India, but, because of the importance of this element, especially for the steel industry, the several magnetic iron ore deposits in India may be worth investigation from this point of view.

The copper deposits of this country are not extensive. The Singhbhum deposit on which the Indian Copper Corporation are

at present working, is the best known. That company is now producing refined copper and brass which is all consumed in the Calcutta market. There are some possibilities in Sikkim, in the Nellore district of Madras, in Jubbulpore and a few other places. The lead-zinc deposits of Bawdwin in Burma also produce copper.

The most important mineral development of recent years is that of the Burma Corporation in the Bawdwin mines of the Shan States near the Chinese frontier. The Chinese had worked the ores here for the silver, leaving slag-heaps containing the lead and zinc. The mines produce sulphide ores containing copper and nickel in addition to the above-mentioned metals. The smelting works of the Company, situated at Nam-tu, now produce about six to seven million ounces of refined silver and also lead, antimonial lead, zinc, copper, nickel and cobalt. The zinc concentrates, however, are exported to Belgium for treatment. The sulphur content of the ores is practically all burnt off. A few years ago, there was a scheme for the manufacture of sulphuric acid from the sulphur content of these ores in works to be erected near Jamshedpur ; but the scheme fell through. The Burmese smelting industry can be made the starting point of a host of subsidiaries like the manufacture of sulphuric acid, lead paints, silver and other chemicals, photographic materials, etc.

India's resources are extensive in the case of the non-metallic minerals, *i.e.*, those which are used mainly for purposes other than the extraction of metals. She is the leading producer of mica in the world. Her ruby-mica from Bihar and Nellore is famous throughout the world. The development of electrical industries depends on the insulating properties of mica. Around the mica mines in general are dump heaps which contain not only much mica-waste but also such useful materials like quartz and potash felspar. These and other incidentally produced minerals like garnet, kyanite, tourmaline, beryl, etc., can be made use of for a variety of purposes.

The mineral magnesite is available in India in practically unlimited quantities in the Salem district of Madras and in Mysore. It forms generally ramifying veins of varying dimensions in the altered igneous rocks. Magnesite is worked by open-cast quarrying methods and generally calcined in kilns to the *'dead-burnt'* variety before export. The Indian magnesite is of high purity, so that it can be used for making special cements or in the chemical industry or for manufacturing carbon-dioxide. Some magnesite is also used in India for making magnesite-bricks for metallurgical furnaces, but in this case it is mixed and ground with ferric oxide mainly for the purpose of bringing down the temperature of fusion.

The mineral called bauxite is also found in India in very large quantities. Its production is at present spasmodic ; and it is used in making high-alumina cements and for purification of petroleum. Soon after the War, there was some activity in prospecting for the mineral in connection with the establishment of a factory for the manufacture of aluminium metal, but the proposition seems to have been dropped. The production of aluminium is in the hands of a small but very strong group of international concerns, and without the strong support of the Government, a new venture is difficult to establish. Moreover, a necessary raw material is the mineral cryolite found only in Greenland and controlled directly by the Danish Government. An artificial substitute for cryolite is possible but its manufacture will increase the cost of production of aluminium. The industry is also one requiring high technical skill since the smelting is done by electricity. Unless an extraordinarily powerful concern takes up the starting of the aluminium industry in India there is little chance of one coming into existence or surviving the international competition even in the domestic market. There is, however, no natural obstacle to the establishment of an industry in India, for hydro-electric power is available in some parts of the country in the neighbourhood of good bauxite deposits.

In modern metallurgical industries, the refractory minerals play a large part. We have excellent resources of such minerals within our borders. Besides magnesite and chromite, which have already been dealt with, we have large deposits of fire-clay, silica and the high-alumina refractories such as kyanite and sillimanite. The last are found in large quantities in Assam, in Singhbhum and in Rewah. These have been used in high grade refractories and for the manufacture of special porcelain, especially for use in the electrical industry.

Some years ago, when the monazite-ilmenite zircon sands were discovered on the Travancore coast, the chief mineral sought after was monazite ; for it supplied the necessary ingredients for the manufacture of gas-mantles. Now, with the rapid development of electric lighting, the mantle industry is losing its importance. Ilmenite has, therefore, assumed the premier place, as it is used for making the paint called *titanium*

white. This white paint has been found to have greater covering power and greater resistance to weathering than other white paints. Ilmenite is also the source of titanium which is an ingredient of some special steels.

Among the necessities of life of every human being is common salt. In India, the production of this commodity is the monopoly of the Government. It is derived from three sources: Firstly, there are the rock-salt mines of the Punjab and the N. W. Frontier. These account for about a tenth or more of the Indian production. Secondly, there are the inland lakes like those of Rajputana, which yield salt during the dry season. Lastly, salt is won from the inexhaustible waters of the sea by natural evaporation in certain parts of the coast. The Rann of Cutch region is one where conditions are particularly favourable, since the land lies just above the sea level, and the sands are salt-impregnated. The sea water covers part of the land during the monsoon time and thus acts as the replenisher.

Though India can certainly produce enough salt for the consumption of her population, a certain amount is imported annually from England, Germany and other countries, perhaps to satisfy the delicate taste of a portion of the population. The annual imports amount to something like five to seven lakhs of tons.

From these metals and minerals we now pass on to building materials comprising various kinds of stones, clay, etc. Within the borders of the Indian Empire there are vast stores of all kinds of stones for purposes of building and decoration, though unfortunately they have not received as much attention from the industrialists as they deserve. The Vindhyan sandstones of the C.P., U.P. and Central India have yielded stones for some of the finest architectural masterpieces of the land. The marbles of Rajputana, Baroda and Central Provinces comprise materials of almost any desired colour and quality, but the long distances that separate the deposits from the chief centres of population have effectively prevented their extensive development. The Victoria Memorial of Calcutta is built entirely of the fine white marble of Makrana in Jodhpur. The quarries were specially worked for supplying the needed material, but have since been closed. The different marbles have also been utilised in many of the famous palaces and buildings in Upper India. But the Grecian and Italian marbles find easy markets in the coastal districts, firstly because the freight charges by sea are cheaper than Indian railway freights and secondly because of better organization of the quarrying industry in those lands.

There are also excellent deposits of fine granite in several parts of India. The 'charnockites' and granites of South India have been used in that land of magnificent temples. The many temples, palaces, the ruins of the Vijayanagar kingdom, etc., are examples. South Indian granites have been used in harbour construction, and they have been found to be the equals of foreign stones from the engineering point of view. In the Bombay Presidency and parts of Central India the trap rocks form an inexhaustible store of stones for all kinds of construction, though from the decorative point of view, their sombre colour is a drawback. Then there is also the easily worked miliolite lime stone of Porbander, which is extensively used in Kathiawar. Lastly the laterite, which is found almost everywhere, is a very useful building stone. It has the property of being soft and easily worked when freshly quarried, getting much harder on drying and exposure.

There are a number of other mineral products which have not been touched upon: clays and sands for pottery, glass manufacture and other uses; alum, amber, gypsum, ochre and other paint materials, abrasive minerals soda, graphite precious and semi-precious stones, etc. Though the value of their production is comparatively small, each plays its part, large or small, in the national economy.

As remarked already, India is at present mainly the producer of raw materials which are practically all exported in the raw state. The following quotation from a lecture delivered by Sir Edwin Pascoe, late Director of the Geological Survey of India, before the Imperial Institute of London in 1931, touches some salient points in the deficiencies of the Indian mineral industry:

> "Surely it is wrong that the concentrates of zinc sulphide from Bawdwin should be shipped to Belgium for smelting and the zinc and sulphur imported back again separately. Where is the red and white lead industry which one would expect to find in collaboration with this mine? Why should it be necessary to import annually even the small quantity of 2,400 tons of lead in the form of manufactured articles? Why is the soft coke industry so insignificant? Why is most of the manganese ore exported in the raw state instead of in the form of ferro-manganese? Would competition with the Malay States make it impossible to smelt the tin of Tavoy and Mergui on the spot

and ship it from almost adjacent harbours? Why is a valuable manure like saltpetre exported to increase the tea crop of Ceylon or to amuse other nations with fire-works? The glass industry is expanding, but India's daughters still spend some £850,000 each year on imported glass bangles and beads, although there are adequate supplies of sand suitable for glass making in the country itself. Is it right that the annual value of the imports of glass-ware exceeds £1,800,000 and that more than half of it should come from Japan and Czecho-Slovakia? How long will it be before India ceases to import steel articles and begins to supply the world with the same instead? How long will it be before this industry absorbs more of the Indian chromite, tungsten, manganese and perhaps magnesite? Is the transport question the critical factor in making it cheaper to import annually £58,000 worth of Italian and Grecian marble instead of buying equally beautiful material in Rajputana, or is it the more systematic organisation of the European quarrying operations? Is not the manufacture of paints capable of expansion? Will agriculturists awake soon to the value of the extensive phosphate deposits in Bihar and Trichinopoly, which, in face of the present low demand, it scarcely pays to work?"

It may safely be said that every metal and mineral industry in India requires considerable expansion even to meet the demand within her borders. The solution of the problems requires the close co-operation of industrialists and technicians and the full sympathy, if not the active support, of the State. The power and prestige of a country in the modern world depends on its industrial advancement and it behoves our leaders and captains of industry to work towards this end with all the means at their command.

The first of the two Tables which follow shows the quantity and value of India's production of those minerals for which regular and reliable statistics are available for the period of the last decade. Table 2 gives the value of production, for the last five years, of other minerals, the figures for which are less relable or are mere estimates. Yet these latter include a number which, undoubtedly, play a great part in the national economy.

Table 1

Quantity and Value of India's Mineral Production for which reliable figures are available.

		1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Coal	L	19,788,569	10,766,433	9,503,828	7,574,599	7,079,852	6,604,106	6,668,591	6,861,134	6,125,804	5,120,045
	tons	19,657,778	21,174,284	20,904,377	20,999,167	22,082,336	22,542,872	23,418,734	23,808,048	21,716,435	20,153,387
Petroleum	L	7,007,915	7,559,233	7,740,727	7,305,509	4,421,468	4,314,207	4,800,448	3,888,727	4,380,389	3,818,875
	Gals.	294,215,053	294,571,692	289,606,542	280,369,326	281,113,909	305,943,711	306,148,093	311,030,108	305,018,751	308,606,081
Manganese ore*	L	2,215,984	2,500,157	2,211,381	1,489,052	2,019,264	1,874,322	1,571,030	1,200,236	726,954	140,022
	tons	695,055	766,449	738,851	613,536	843,821	834,144	994,279	829,946	537,844	212,604
Gold	L	1,702,642	1,827,433	1,673,501	1,624,238	1,626,913	1,588,252	1,542,109	1,384,090	1,540,885	1,906,123
	Oz.	422,307	696,351	393,895	384,158	384,272	376,063	363,869	329,232	330,489	329,682
Lead and ore	L	1,121,474	1,672,652	1,645,477	1,666,587	1,641,095	1,642,036	1,845,641	1,370,712	954,687	826,736
	tons	245,925	73,068	46,647	53,679	66,424	78,294	79,033	78,030	73,280	70,560
Silver	L	677,207	810,869	705,503	663,063	708,846	892,460	802,734	571,005	387,351	471,557
	Oz.	4,863,066	5,309,203	4,856 422	5,126,088	6,024,806	7,425,810	7,298,327	7,072,050	5,923,005	6,026,737
Salt	L	749,382	700,717	574,628	836,830	849,265	745,899	844,400	943,808	1,010,441	898,754
	tons	1,781,156	1,623,475	1,295,144	1,638,749	1,611,945	1,515,349	1,709,099	1,711,348	1,839,400	1,610,861
Mica*	L	538,435	679,796	799,483	820,901	691,341	698,130	784,092	562,054	307,316	251,800
	Cwt.	83,296	70,095	99,699	89,947	77,488	95,479	116,075	82,909	52,966	47,021
Zinc concentrates	L	11,584	151,784	152,325	471,977	546,229	559,412	507,532	190,615	127,669	113,481
	tons	2,062	18,650	16,810	48,834	58,286	64,122	58 435	57,620	51,455	44,484
Tin and tin-ore	L	185,641	208,179	267,931	455,362	493,864	338,895	447,567	337,344	259,806	339,097
	tons	1,966	1,880	2,308	3,548	3,495	2,780	3,785	4,271	4,255	4,525
Iron ore	L	136,415	279,610	336,775	349,676	380,735	413,060	484,420	360,928	308,055	294,720
	tons	804,384	1,445,313	1,544,578	1,659,295	1,846,735	2,055,992	2,428,555	1,849,625	1,624,883	1,760,501
Copper ore & matte	L	4,367	114,714	301,875	318,381	336,836	372,202	483,529	521,003	407,181	338,156
	tons	6,500	2,935	34,348	20,949	16,882	29,038	88,139	140,895	167,073	185,104
Saltpetre*	L	149,757	201,382	147,617	98,846	113,632	74,629	71,720	53,445	73,414	92,272
	Cwt.	8,555	167,700	126,973	98,830	123,018	89,570	91,708	76,538	128,117	165,782
Chromite	L	51,119	42,259	40,171	30,810	65,743	57,139	62,818	64,256	23,385	20,727
	Tons	54,242	45,462	37,452	33,382	57,207	45,455	49,565	50,684	19,913	17,865
Wolfram	L	31,979	24,559	33,975	57,535	42,537	22,354	113,193	134,065	65,809	52,921
	Tons	872	739	772	1,484	1,160	622	1,348	2,452	2,248	2,028
Jadeite*	L	55,803	50,849	12,237	35,091	22,570	43,468	36,280	16,187	26,094	28,359
	Cwt.	3,088	2,766	972	2,139	1,961	2,698	2,137	1,475	2,500	3,654
Sapphire, ruby & spinel	L	48,679	34,773	27,454	34,834	20,833	13,247	13,564	9,715	3,175	...
	Carats	187,010	101,097	149,037	105,671	39,590	40,380	43,650	30,090	...	...
Magnesite	L	15,622	21,088	31,179	26,444	17,115	11,969	9,640	6,277	2,026	5,470
	Tons	19,436	24,461	29,620	30,461	19,638	24,406	23,497	16,523	5,333	13,864
Antimonial lead	L	...	22,027	21,373	24,119	10,714	24,427	25,231	26,300	14,781	6,627
	Tons	...	1,200	1,110	1,165	1,003	1,611	1,200	1,700	1,505	642
Ilmenite	L	2,100	1,381	492	7,537	33,443	41,557	28,602	32,993	41,991	58,184
	Cwt.	700	641	328	4,326	17,809	25,307	23,670	28,776	36,166	50,053
Nickel speiss	L	...	...	...	..	13,176	39,922	47,670	53,790	49,924	77,269
	Tons	...	...	...	...	1,032	2,933	3,065	3,150	2,911	8,580
Zircon	L	1,160	2,717	4,608	2,987	8,129	4,267	10,805	4,991	7,972	8,805
	Tons	145	365	576	532	1,465	855	1,743	640	855	491
Monazite	L	3,697	9,301	...	947	3,810	1,242	1,800	140	890	6,147
	Tons	246	622	..	64	280	103	180	14	89	654
Diamonds	L	3,100	1,985	1,098	2,131	3,354	4,887	3,884	5,373	2,569	5,428
	Carats	115	66	48	69	113	824	[illegible]	1,321	639	1,254
Total value L ...		24,452,63	27,633,898	26,233,638	23,927,506	21,150,764	20,382,089	21,207,300	8,599,188	16,848,018	14,876,525

*Export figures.

Table 2

Value of production of Minerals for which the returns are incomplete

(In pounds sterling)

	1928	1929	1930	1931	1932
Building Materials ..	1,110,907	1,121,032	1,096,035	851,741	685,877
Clays	31,655	40,636	28,284	25,615	19,451
Gypsum	10,919	8,784	8,408	7,254	7,125
Refractories	6,360	7,203	15,484	5,108	10,100
Steatite	9,706	20,683	15,266	9,001	9,786
Bauxite	7,034	5,399	1,490	...	...
Ochre	3,953	4,095	3,951	1,918	2,489
Fuller's Earth	1,852	1,917	2,395	2,542	3,405
Barytes	1,463	1 697	3,671	3,200	2,209
Asbestos	1,622	1,206	88	5	677
Amber	897	454	54	...	146
Apatite	1,081	15	266	79	81
Soda	44	44	109	31	83
Total ...	1,187,493	1,213,115	1,175,501	906,494	741,329

INDUSTRIAL SECTION:

THE INDIAN COAL INDUSTRY

COAL IN INDIA AND INDIAN COAL IN THE WORLD.

In importance, the coal industry in India can hardly compare with cotton, or jute, or with the pure agricultural staples. Our production of both raw cotton and cotton goods is a substantial portion of the world output; in jute we have a practical monopoly; and the agricultural staples have a significance in the national economy apart from, and independent of, their relation to the output, and markets of the rest of the world. But in coal our annual production is an average of 20 million tons, out of a world production of about 1,250 million tons. The industry in India has comparatively less capital invested in it; and the chief collieries are confined to the provinces of Bengal and Bihar and Orissa. Withal, it is one of the most important industries, one in which the public can never afford to take a mere lukewarm interest. First, the welfare of the coal industry, though it fills a smaller place in the whole of India, is of vital importance to Bengal and Bihar and Orissa. Secondly, coal is by every criterion a key industry. A good supply of coal is one of the basic conditions of industrial progress. Our vast railway system would be unworkable without a well-worked coal industry. So would a coastal marine be when it is evolved by our nationals.

Before we examine the position of our coal industry, it would be well to delineate some of the peculiarities of the economics of coal production. Coal, like other minerals, does not possess the adaptability of agriculture. A coal mine cannot be turned, when the price is not adequate, to any alternative production as, for instance, many agricultural farms or some industrial plant may be. Secondly, there is a preponderance of fixed capital and labour charges in the coal industry; and this tends to make a state of idleness more costly than production at a loss. Thirdly, a coal mine is subject to the law of diminishing returns or increasing costs very much more than other industries. The complete extinction of the mine is not a remote possibility but the definite end, and has to be taken into consideration in determining costs, prices and profits. Differential costs are both common and high; and prices may often be determined by the mine which is more advantageously situated. Another important point is that coal is not a simple product of uniform quality. One class is suitable for cooking, another as steam coal and a third for household purposes. But they do not fall into separate non-competitive categories; and prices move in sympathy. In other words, quality excepted, prices find their level. And lastly, demand for coal is more or less inelastic; a fall in price does not induce an increase in demand. All these show how difficult it is for the coal industry to devise a remedy when it is afflicted with over-production caused either by increased output or, for some reason, a fall in demand.

We may now turn to sketch briefly the features and changes in recent years of the world's coal industry. The remarkable feature of the coal industry of the world is that out of a production of 1,217 million metric tons in 1913, 517 million tons were produced in U.S.A. and 605 million tons in Europe. So that, so far as the position of the world's industry is concerned, the rest of the world can hardly be said to count. Of the total European output, 292 million tons were produced in Great Britain, and 190 million tons in Germany. The other important producers were France 40 million tons, and Belgium 23 million tons. Between 1888 and 1913 world output had increased by nearly 200 per cent. This was the period of the most rapid progress in industrialisation, particularly, in U.S.A. and Germany. In U.S.A. the increase was approximately 300 per cent., in Germany 200 per cent. and Great Britain

which, coal like other industries suffered from disorganisation. By 1924, there was a fair recovery and a resumption of the onward march. In 1927, the output of coal exceeded the pre-War output.

At this time, there came two important developments which affected the position of the British coal industry in a very serious way. The Saar region was placed under the terms of the Peace Treaty under separate control and the greater part of the Eastern coalfield was transferred to the new Poland. At the present time there are three countries which export more coal than they import —Great Britain, Germany and Poland. And their competition is intensified because world demand for coal has not kept pace with the world production. Not only has there been a big increase in production, but the need for coal has been reduced by the increased competition of lignite on the Continent, the growing use of oil in ocean and land transport, and of gas and electricity in the homes and factories and lastly the enhanced efficiency of steam-raising. The world market reveals the competition between coal produced under competitive conditions and coal that is indirectly subsidised by lower railway and ocean freights. Each country is exposed to the dangers of blind competitive forces which aim not at maximum profit but minimum loss. Selling organisation and selling agreements are tried and work with questionable success. And on the top of all this trial and tribulation, is the blight of the economic blizzard.

INDIA'S COALFIELDS.

Raneegunge and Jharia are the best-known coal fields in India. They account for about 90 per cent. of the total production and the rest are raised in other fields some of which lie not only outside the provinces of Bengal and Bihar and Orissa, but also in the Native States. Raneegunge which produced 6.5 million tons in 1930, is situated in Bengal and was opened up in 1820. Jharia which yielded 9.7 million tons in the same year was started in 1893. The other fields are of comparatively recent origin. Joint stock coal companies have invested more than Rs. 12 crores in the industry; and there is besides a small knot of coalfields owned by the railways for which details of capital are not available. Though Raneegunge and Jharia tower over all the rest of the coalfields in India, the progress made by the latter is by no means insignificant. It would be well, before we proceed to sketch the recent history and the present problems of the Indian coal trade, to have a short sketch of the distribution of the coalfields and to afford some data for an estimate of their value and importance. The Raneegunge fields cover an area of about 500 square miles spread over the districts of Burdwan, Bankura, Manbhoom and the Central Pargannas. The Raneegunge fields are very favourably situated for the export trade, the freight in their case to Calcutta being very much less than from the other fields. The more important seams are Dishergarh, Poniati, and Sanctoria; the next class is represented by Ghusick, Koithi, Chanch, Salanpur, "A" Samla, Kajora and Jambad. As the Raneegunge fields were opened up as early as 1820, the raising costs are distinctly higher.

The Jharia field comprises an area of 150 square miles. It contains 18 seams of coal. The trade distinguishes 18 classes of its output of which the last 9 are considered to be very poor. Operations were commenced in 1893. The Bokara field has an area of 200 square miles. It is worked chiefly by the various Indian railways and its output in 1930 was 1.6 million tons. The working is easy and cheap and the total resources of this field are estimated to be over 1,000 million tons of coal of first-rate quality.

The Karanpura field, which falls into divisions, North Karanpura and South Karanpura with areas respectively of 472 square miles and 72 square miles, contains thousands of million tons of coal, though of somewhat poor quality. This field may prove in the future to be more profitable as it is having increasing transport facilities and the actual working may be more easy and less costly than fields similarly situated.

The Giridih field is controlled by the East Indian Railway for their own needs. It is seven square miles in area and the coal is accounted to be of the best quality. The coalfields in the Central Provinces have been spotted only recently. The quality, it is apprehended, may be found to be very poor and working on a commercial scale will have to await the development of more satisfactory railway communications.

The Pench Valley and Kanhan fields are fortunate in having a good transport service from the G. I. P. and the B. N. Rlys. In common with the Chanda fields

they find ready market for loco and mill use. The Central India fields lie to the East of the Katni-Bilaspur section of the B. N. Rly. and a railway line has been projected to facilitate the opening up of large deposits of coal in this region.

The Rewa State contains an area which has a convenient market near to it in the Lime and Cement factories in the Katni district. Burhar is situated in the same State and has an annual output of about a lakh of tons.

Korea which lies in the Native State of the same name contains high-class coal and is being developed.

The Talcher field is worked by the B. N. and M. S. M. Rlys. Its development will grow with the new port of Vizagapatam; and the future may show it to be advantageously situated both in regard to S. India as well as some of the ports of the South East of India.

The Assam field is practically marked out from the railways of Eastern Bengal, and Assam, the steamers navigating the rivers of that area and the tea gardens in neighbouring districts. The product is of high quality and the mines are worked by adits driven into the hillside.

OUTPUT & MARKETS.

Independent of the fluctuations in the fortunes of coal companies, the output of coal in India has gone ahead, as may be seen from the following two tables giving the figures of production for the last thirteen years and for the last five decades:

Production Year by Year.

Year.	Tons.
1920	17,962,214
1921	19,303,947
1922	19,010,986
1923	19,656,883
1924	21,176,606
1925	20,900,088
1926	20,999,167
1927	21,082,336
1928	22,542,842
1929	23,418,734
1930	23,803,048
1931	21,716,435
1932	19,679,154

Production at the end of each decade.

Year	Tons.
1880	1,019,793
1890	2,168,521
1900	6,118,692
1910	12,047,416
1920	17,962,214
1929	23,418,734
1930	23,803,048

The imports and exports of coal into and from India are given below:

TABLE I.

EXPORTS OF COAL.

(Quantity in Tons).

	1931-32	1932-33	1933-34
United Kingdom ...	11,955	31,529	29,892
Ceylon	272,680	169,081	225,415
Straits Settlemets (Incl. Labuan) ...	23,431	20,550	5,391
Hongkong ...	162,265	188,571	99,286
Philippine Islands & Guam ...	37,007	8,278	6,242
Other Countries ...	7,779	34,064	9,087
Total ...	515,117	452,073	375,313
Coke ...	1,870	2,136	827

TABLE II.

IMPORTS OF COAL.

(Quantity in Tons).

	1931-32	1932-33	1933-34
United Kingdom ...	23,760	15,994	9,776
Union of South Africa	23,241	13,516	34,710
Portuguese East Africa			...
Australia ...	3,805	3,015	6,165
Other Countries ...	4,813		5,670
Total ...	55,619	34,800	56,351
Coke ...	12,144	12,678	19,791

The channels of consumption for this supply of coal are indicated in the following table which gives the figures for three years:

TABLE III.

(In Thousands of Tons).

	1932	1931	1930
Railway (including workshops)	6,443	6,629	7,581
Port Trust	135	156	197
Bunker coal	1.077	1,109	1,272
Admiralty and R I. M. Shipping accounts ...	30	29	31
Inland steamers ...	579	621	702
Jute mills	658	673	867
Cotton mills	1,361	1,311	1,260
Iron and Brass foundries ...	3,997	4,716	5.606
Tea gardens	203	189	202
Consumption at collieries and wastage (estimated)	2,015	2,172	2,380
Brick and Tile manufacture	669	758	1,089
Paper mills	142	146	159
Other forms of industrial and domestic cousumption	2,375	2,846	2,218
Total	19,679	21,855	23,514

It will be seen from the above that the chief consumers, not to speak of the collieries themselves, are, in their order, the Railways of India, the Iron and Brass Foundries, Cotton mills, Bunker coal, Brick and Tile manufacture. It is equally obvious that the fundamental condition of the growth of the coal industry, a vast and widespread industrialisation, is lacking. And even within the narrow limits indicated by the figures cited above, elements of unsettlement have been rife especially during the last one decade after the War. The railways who form the chief consumer of Indian coal have acquired and been working their own coal mines. Objection has been taken to this development on the ground that as the railways are owned by the State, the establishment of railway collieries would mean an unjustifiable and unwarranted encroachment of the State into the sphere of private industry. It is of course, contended in reply that as the railways are commercial enterprises, they must have freedom to develop their business interests and devise combination of a vertical nature, if they deem it profitable to do so. The railway collieries have been developed in the face of natural opposition; but with the increasing troubles of the coal industry the Government have shown themselves more sympathetic to the appeals of the trade regarding the working of the collieries.

Apart from the existence of railway collieries there are other factors which affect the welfare of the coal industry in India. The most important of these is the electrification of the suburban railways of Bombay, as also the railway between that City and Poona. With the completion of the schemes of electrical development in S. India, the South Indian and the M. & S. M. Railways are also bound to follow suit. But while these factors may create a temporary disturbance to the market and some concern to the collieries, they are no permanent threat to the coal industry as a whole. For railway development, though it may now be held up owing to financial stringency, is by no means at an end. There is still vast scope; and there need be no fear that so far at least as the railways are concerned, they will fail to contribute to the total demand for Indian coal.

The Bombay cotton mill industry is the next channel of consumption which offers a frequent threat of silting up. In this market, too, there appears on a somewhat larger scale the danger which was mentioned in regard to the railways. Mills and factories are worked more and more by oil or electricity; and to the extent this vogue is on the increase, the prospects of coal consumption in Bombay must be less. But it is not, of course, to be expected that the change from coal to oil or electricity will be sudden or on a large scale. And in the worst circumstances Bombay must be a market which Bengal or other Indian coal can hardly afford to despise.

But in Bombay, Indian coal has to meet with the powerful competition of South African coal. In that country the coal trade and the Government work in closest co-operation. The Railways are State-owned; and bounties are best given in the shape of railway freights which have no relation to the economic rates. It has become almost the established custom in South Africa to have one rate for the internal movement of coal, another for coal intended to be bunkered and a third, which is the lowest, for coal exported to foreign countries like India, Ceylon, Sumatra, etc. In consideration of this fact the Indian Coal Committee of 1925, recommended an increase of 50 per cent. in the rebate on railway freights for coal for shipment ; and the acceptance of this recommendation meant a reduction of annas eleven in the cost of transporting coal to Bombay and Karachi. But there is one important circumstance, which it is difficult to provide against. And it is that coal from the United Kingdom or South Africa is carried practically in ballast. Steamers expect, and do get, valuable cargo from Calcutta, Bombay and Karachi; and while proceeding to pick up such cargo they can afford to take cargo at rates which by themselves would seem to be uneconomic. Such advantages are for the same reason denied to coal going from Calcutta; and in this sense, the export of our precious raw materials may be said to inflict a double injury.

Recently, attempts have been made on grounds of patriotism and Swadeshi to induce Bombay to patronise Indian coal to the exclusion of the imported commodity. The request of the coal owners of Bengal in this behalf is only a request for reciprocity in matters of trade. The proposal was made by the Indian Mining Federation but was rejected by the Bombay millowners on the ground that Bengal coal is not an economic proposition. But for the interests involved, the reply of the millowners could be treated as a huge joke.

The other Indian ports offer no considerable demand for Indian coal. The industrial needs of the interior of the country are being met from the coal fields near at hand. This development has been helped by the fact that the growing technique of industry has enabled the use of low grade coal where formerly only the best coals were suitable. And the Government of India increased the freights on coal other than those intended for export or bunkering by 15 per cent. as from January, 15, 1932. The cumulative effect of all these developments is that Bengal coal will be cut off more and more from the interior and thrown on the so-called export markets.

The foreign markets have for long been the weakest spot of the Indian coal trade. It is here that the trade has suffered the worst vicissitudes, though the surplus of production over internal consumption is not very high, the disposal of this surplus at remunerative rates is of vital importance to the whole industry. Disturbance in the foreign markets deepens into depression at home and the export trade has, therefore, been the concern of the collieries and the Government. It is necessary in an examination of this subject to realise that all the coal passing through the port of Calcutta is not intended for the foreign markets, a part of it is for bunkering, a part for the Indian ports and only the remainder goes to the foreign markets. The exports of Indian coal began to be of importance only in the five years ending 1900 when they averaged 30,500 tons annually. For the pre-War period the peak was reached in 1906 with an export of a little over a million tons, and for the decade ending 1915, the annual average was slightly about three quarters of a million ton. It was only two years after the war in 1917, that exports began to be affected through the shortage of shipping which obtained at that time throughout the world. In 1918, the lowest point was reached with 74,000 tons. The end of the war helped a rapid recovery and 1920 saw exports mounting up to so high as 1.2 million tons. The rapid expansion of the demand for coal after the war involved a very heavy strain on the railways in the years 1919-20. The coal trade came to monopolise the available supply of wagons with the result that other commodities and trades were held up. In July, 1920, the Government of India following the example of the United Kingdom and South Africa, decided to prohibit the export of coal from India except under license with effect from July 24, and from September 1, to refuse the preference which had till then been accorded by the railways to bunker coal for Indian ports. It was hoped, at the time these restrictions were imposed, that the bunker coal intended for the ports of Bombay, Madras and Karachi which were then taking an all-rail route would be diverted to the port of Calcutta and would then reach their destination by coastal steamers. At a later stage, it was deemed advisable to restrict the free export of coal and to allow the exports to the former foreign markets only on the basis of a rationing scheme. Within a half year, it was found, on account, among others, of a fall in the raisings to the extent of 4½ million tons, that the provisions were not drastic enough. From the end of January 21, exports to Labuan and Singapore were altogether prohibited. Colombo was allowed a diminished supply till the end of March and thereafter only to the Ceylon Government railways and a few public utility concerns. Even bunkering coal was reduced to the minimum necessary for enabling the steamers to reach the next nearest source of bunker coal. In July 22, all restrictions on the export of cargo and bunker coal by sea to ports in India were removed. The embargo was not entirely removed till January 1, 1923.

The inevitable result of this interference with the flow of coal to foreign markets was that Indian coal was ousted from its place and that South Africa which is the chief rival to India fully established herself in those markets; and it is easy to understand that once business relationships are established it is difficult to terminate them in favour of even an older customer. It has been remarked already in an earlier section of this article that, the Government and the trade in South Africa work in the closest co-operation and that among the many measures introduced for strengthening the export trade in South African coal was the action that had been taken to prevent the use of any but the best coal for export and bunkering and to ensure the satisfactory condition of any coal so used. By 1924, the situation resulting from the loss of the foreign markets had become serious.

The coal trade applied for protection; and as the questions involved were deemed to be of a highly technical nature, the Government decided to appoint the Indian Coal Committee, which would go thorough-

ly into the question and submit a report which might possibly be regarded as the basis for the Tariff Board to work on. The findings of the Indian Coal Committee are naturally various and varied. Their most important finding was that the problems of the Indian coal trade may be summed up in two words "quality" and "price." In regard to the former, they inclined to the view that, though the restriction placed on exports during the period after the War had much to do with the ultimate loss of the foreign markets, there have been even from earlier times a decided dissatisfaction amongst the foreign consumers with the quality of the Indian coal and that, even if the restrictions on exports had not been imposed, India would in any case, have been superceded by her rivals in Colombo, Singapore and other ports. As regards price, they went elaborately into the factors entering into the price of coal at the various consuming centres. Naturally, these factors fell into four divisions: (1) cost of raising; (2) railway freights; (3) port charges, in the case of coal for foreign markets and Indian ports and (4) shipping freights. The Committee after a careful examination gave their finding that Indian coal, by all the accepted criteria in this regard, is, if anything, superior to the rival product from South Africa; and that if greater care were expended in the raising, handling and selection for foreign markets of Indian coal, our products can very well stand the competition from abroad and slowly find it possible to regain the lost markets. For this purpose, the common methods of pooling and grading were suggested in the evidence before the Committee and were considered by them. The Committee decided that no pooling was essential for this purpose. They accordingly recommended the appointment of an Indian Coal Grading Board to classify the different seams at Indian collieries, to prepare a grading list and grant certificates of shipment. The recommendation was given legislative effect in 1925; collieries included in the grading list receive a special rebate on railway freight and a reduction of port dues and of shipment of cargo coal approved by the Grading Board. With the institution of the Board, foreign markets have been enabled to ascertain beyond doubt the origin and quality of the coal consigned to them. The quality of the coal shipped under the supervision of the Board has helped Indian coal to regain the footing it had lost in the markets of the East owing to the indiscriminate shipments of earlier years.

Apart from the prospects of Indian coal as such, Bengal coal would seem to have problems of its own. We have already mentioned that there will be an increasing tendency on the part of the industrial consumers in the heart and farther ends of the country to have their needs supplied by the collieries near at hand. This has been possible as the technique of steam raising enables the use of inferior coal in place where formerly there was no alternative to the use of best qualities. In these circumstances Bengal coal will have to fall back entirely on the export markets; and this is a prospect which it need not fear as Bengal coal is of the highest quality and well appreciated by foreign consumers. But the internal coal market has been during recent times in a state which the producers can by no means regard as wholesome. Coal prices are determined by the rates obtained at the railway tenders; and the fact that the railways themselves are owners and managers of collieries tends to undue depression of the market. It has naturally been the insistent demand of the coal trade that the railways should cease to work their collieries. While this desideratum has not been fully secured the coal owners of all sections attempted for their part to reduce undue competition amongst the producers.

The Calcutta Coal Conference which was convened in 1929 by the principal owners was the first step in this direction. The Conference was able to enforce certain fixed minimum prices for the various qualities and raise coal prices to higher levels than it would have been otherwise possible to attain. Unfortunately the depression had hit the industry so hard that the morale of the Conference got weakened and the Conference was dissolved in a short while. The result was a still further decline in the prices of coal.

The year 1932-33 saw a worsening of all the adverse features of the coal trade referred to earlier, and the primary cause of the increase of all these handicaps was the imposition of a surcharge of 15 per cent. on rail freight on coal. The effect of this, it has been contended, is to give an unfair advantage to the coalfields of the Central Provinces, as, with a 15 per cent. surcharge, the basic rate in respect of the coals of these two areas is in favour of the C. P. coal. The practical effect of the surcharge is to make Bengal coal considerably dearer to Western and Southern

India and to other places away from the coalfields in Bengal and Bihar and Orissa.

As a result of the various representations made by the coal trade of Bengal and Bihar and Orissa, the Government agreed to do something and raised the rates for the transport of coal from the collieries in the Central Provinces as from the 1st of April, 1934. The Government's action, however, far from removing the existing disparity has only reduced the difference. As it could be readily envisaged, this half-hearted action on the part of the Government has pleased no body. Probably, the only tangible result is to augment the revenues of the Government. It passes one's understanding why the Government of India should still persist in maintaining a disparity in the basic rate of freight between Bengal and C. P. Coal.

The comparative prices of 1932-33, 1933-34 and 1934-35 are given below:

	1932-33			1933-34			1934-35		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Dishergarh	4	12	0	4	4	0	4	0	0
Poniati	4	8	0	3	15	0	3	12	0
Super Jharia	4	12	0	4	4	0	3	8	0
Selected Jharia	4	8	0	4	2	0	3	0	0

The difficulties of the Coal industry of Bengal and Bihar and Orissa have mounted up, like Pelion upon Ossa and, as a result, have succeeded in making the industry one of the most disorganised, in India. The unhealthy competition amongst the coal owners themselves has also contributed in no small measure to the ruin that is almost staring them in their face. After protracted and delicate negotiations the three bodies interested in the coal trade of Bengal and Bihar and Orissa *i.e.* the Indian Mining Association, the Indian Mining Federation and the Colliery Owners' Association agreed upon the essential principles of a scheme of restriction with differences of opinion restricted to certain details such as the constitution of the Board of control. The scheme was submitted to the Government of India in December, 1933.

Though the scheme is still the subject of consideration by the Government, it is unquestionably useful to give here its main outlines:—

(1) (*a*) The Restriction scheme shall be in force for a period of three years in the first instance, restriction being effected by control of wagon supply.

(*b*) The operation of the Scheme shall be restricted to Collieries in British India, in Bengal, Bihar and Orissa and the Central Provinces.

(2) The Scheme shall be administered by a Committee of nine persons, eight being members nominated by the Coal Trade, as follows:—4 members by the Indian Mining Association, 2 members by the Indian Mining Federation and 2 members by the Indian Colliery Owners' Association, with an independent Chairman appointed by Government.

(3) (*a*) The Standard Tonnage of all collieries shall be the average annual output of the years 1930-31-32. The lowest quota shall be 75% of the Standard Tonnage but the Committee shall have power to vary the quota from time to time as they consider necessary. The initial quota shall be not less than 80% of the Standard Tonnage, and every colliery in receipt of an initial quota shall be registered with the Committee. The minimum quota allotted to any colliery shall be 18,000 tons per annum and any colliery which was closed down for the whole or part of the period 1st January 1930 to 31st December, 1932 shall be allotted either the minimum quota of 18,000 tons referred to above or 1/3rd of the Colliery's actual raisings during that period, less the percentage of restriction in force for the time being, whichever shall be the greater.

(*b*) Collieries in Central Provinces (British India) shall be allotted a quota equal to 100% of their standard tonnage.

(4) (*a*) The whole or part of any quota may be transferred. Transfers of quota shall be registered by the Committee. Sales and transfers of quota shall only be permitted between registered holders of quota.

(*b*) In the case of colliery in receipt of the minimum quota of 18,000 tons the sale or transfer of quota shall be limited to the Standard Tonnage, or to 18,000 tons whichever is less. In the case of any such sale or transfer the balance of the quota, over and above the Standard Tonnage if any, shall be cancelled.

(5) In the case of collieries which were closed on or before the 31st December, 1920 or which started despatches after 1st January, 1930, each individual one shall be dealt with by the Committee on its merits, due regard being had to the productive capacity of such colliery.

(6) Collieries manufacturing soft coke shall be on the same footing as all other collieries.

(7) In cases of shipment to ports outside India and Burma extra wagons will be given without any penalty.

(8) In the case of collieries which, prior to the introduction of the scheme, have sold beyond their quota, the Committee shall, on the application of such colliery, scrutinise all contracts made and shall have power to

award such additional quota to such colliery as in their opinion is considered justified. Any additional quota so awarded shall however in no case be effective later than 31st March, 1935.

(9) Sanction shall be sought from Government to amend the Coal Grading Board Act 1925 to allow of all expenses in connection with the working of the Restriction Scheme to be met from funds at the disposal of the Indian Coal Grading Board.

(10) The Committee shall deal with all matters arising out of the Restriction Scheme and their decisions shall be final and binding.

The "minor details" unfortunately have assumed huge proportions and have more or less completely wrecked the whole Scheme. The main trouble is the unwillingness of the Indian Mining Federation to permit the Indian Colliery Owners' Association to have equal representation with itself on the Coal Restriction Committee as provided in section (2) of the Scheme. It would not be out of place here to mention that the Indian Colliery Owners' Association is mainly composed of non-Bengali coal owners, who were originally members of the Indian Mining Federation and who for reasons into which it is unnecessary to enter here decided to form a separate organisation of their own. The Indian Colliery-Owners' Association, which was formed in March 1933, has however, come to occupy a strong position amongst the Indian coal owners and the total coal output of their members even now is larger than that of the Indian Mining Federation. The objection of the Indian Mining Federation to extend 'diplomatic' recognition to the Indian Colliery Owners' Association can be seen in the natural psychology of a parent body to its seceders.

In their letter of the 21st March, 1934 addressed to the Indian Mining Association the Government expressed themselves in favour of the principle of restriction ; but they pointed out that the particular Scheme was defective in several respects. Amongst other things, they state that there is no unanimity in the industry concerning the Scheme ; that Scheme does not extend to the Indian States which produce coal, that the authors of the Scheme have failed to adduce statistical facts in support of their statements concerning the uneconomic level of prices, cost of production, fall in prices and continued depression.

The Indian Mining Association contend that the Scheme they have sponsored has the support of producers responsible for nearly 95 per cent. of the total output of British India and it may therefore be considered as being practically unanimously accepted. As regards the charge that the Indian States are left out, the Association justly point out that the application of the scheme to Indian States is not a matter within their province and in any case to the Government which has secured prompt action in the States regarding the Sugar and Match Excise Duties, the application of the scheme to the coal industry in the States should present no difficulty.

A careful perusal of the correspondence between the Association and the Government leads one to the belief that on the whole the Association stands on sure grounds in its parleys with the Government. It cannot be doubted that the coal industry is in urgent need of Government intervention to rehabilitate itself. And it cannot be doubted that the squabble in the Indian section of the industry over minor details is threatening the existence of the industry itself. While there may be differences of opinion as to the issues in dispute between the two Indian coal producers' organisations, the needs of the industry and the duty of the Government are quite clear.

INDUSTRIAL SECTION.

THE INDIAN JUTE MILL INDUSTRY

MAINLY HISTORICAL

Though historical records of a comparatively distant past contain many references to fibres which were closely related to, if not identical with, jute, it was not till the middle of the last century that jute and jute manufacture attained a definite importance in world trade and commerce. Obviously, a variety of fibres were known to the ancients and were in active use; and it would be difficult to determine their identity among those that we know today. But it is certain that about the beginning of the nineteenth century the word *pat*, which is so commonly heard in the bazars of Calcutta had come to denote definitely the botanical species known as *Corchorus capsularis* and *Corchorus Olitorius*. The word jute, however, seems to have been used for the first time in official records by Dr. Roxburh, the Founder and Director of the Botanical Gardens, Calcutta, who was also the first to see its possibilities as an article of export, in a letter to the Court of Directors of the East India Company, which he sent along with a bale of the fibre in 1805. More followed; and by 1820 jute was being spun for use in carpets at Aingdon in Oxfordshire. But old prejudices die hard; and in the light of the subsequent progress of jute it should seem strange that it was a standard condition of business in the flax trade in those times that goods for delivery should be "warranted free from Indian jute."

It is natural that jute should attempt its first entry abroad in places carrying on the spinning and weaving of flax and hemp. Dundee had, therefore, a consignment of jute in 1822; but the spinning of this fibre was found to be far from easy; and it took some years before Dundee found how to use them for door mats. Progress, however, though slow, was steady. By 1828, raw jute came to have a separate heading in the Calcutta customs records; and the shipments in that year amounted to 364 cwts. Then whale oil was found to have the property of softening the fibre and making it more easy to spin; and with the spread of this device, the demand for the fibre increased. Exports swelled to 11,800 cwts. within a period of less than five years and the price had doubled itself by 1837. Coffee came to be transported from the Dutch East Indies in jute bags; and with a foreign Government enlisted as a large-scale consumer, the jute industry was firmly established in Dundee.

The development of mechanical production in Dundee had its natural effects on conditions in Bengal. The handloom industry had shown a surpassing vitality; and up to the middle of the last century India's exports of jute manufactures were more in value and volume than the exports of the raw material. But later on with a rapidly increasing demand for jute from abroad, it became more profitable for the agriculturist to concentrate on the cultivation of jute than to continue a competition in which the odds were against him.

The normal progress of the jute industry was given a sudden and artificial stimulus by the Crimean War which shut out Russia's flax and hemp from the world markets. In the same way, the American Civil War deprived the manufacturers of cheap cotton bags of their raw material. In both these cases jute was the most obvious substitute; and it made most of these opportunities. Its place in world trade was assured. And from this time exports showed a steady and rapid rise. The peak year was 1908-09, when 897,000 tons were exported, with 1927-28 as a close second with exports of 892,000 tons.

The establishment of mills in India for the manufacture of jute with European machinery did not begin till after the middle of the nineteenth century. The first jute millowner is reported to be one Mr. George Acland. His original intention was to push *rhea* ahead of flax and hemp and visited Dundee with this pur-

pose in view. But with commendable quickness he appreciated the more useful qualities of jute; and in 1855 he erected the first jute spinning mill at Rishra near Serampore on land which was afterwards the site of the Wellington Jute Mill. Two years later the first weaving factory was erected at Barnagore. With such a conclusive demonstration of the profitableness of jute spinning and jute weaving and with the trade showing such remarkable capacity for expansion, other factories followed in rapid succession.

The first power loom was erected by the Borneo Company, of which Messrs. George Henderson & Co. were the agents. Its combination of spinning and weaving proved to be a very decisive factor in its success; and within a few years the equipment and output of the Company were doubled. It was followed in 1862 by the Gourepore and the Serajgunge Mills. The India Mills came on in 1866; and the result was an increase in loomage in the short period between 1869 and 1873 from 950 to 1,250. In 1872-73 Budge Budge, Fort Gloster and Seebpore (later changed to Fort William) were registered in Calcutta and Samnugger and Champdany in Scotland. Before two years were over, Oriental (now Union North), Howrah, Asiatic (now known as Soorah), Clive, Bengal (now Belliaghatta), New Central (formerly Rustomjee), Hastings and Ganges followed. Such rapid inrush of new mills took up the total loomage to 3,500 and apparently caused a state of temporary disequilibrium in the trade. Only Kamarhatty ventured into the field in 1877. And it was not till 1882 when the mills had over 5,000 looms that the next bout of new ventures started, lasting for about three years. At the end of this the loomage had increased to 6,700, of which 4,900 were sacking and the rest hessian.

Again production outstripped demand; and the obvious need for restriction of output suggested the equally obvious expedient of forming the Indian Jute Mills' Association. Its function has been mainly to bring the producing units together for purposes of regulating the output as and when necessary. No new mills were built in the decade ending 1895. But it is a feature of the jute trade that existing mills had been regularly increasing their loomage and by 1895 the loomage had increased to 9,701, of which 3,117 were sacking. The next quinquennium saw the advent of Gondolpara, Kharah, Alliance, Anglo-India, Standard, National, Delta, Kinnison and the present Lansdowne. The opening years of this century were not marked by any new flotations, but between 1905 and 1910 Dalhousie, Alexandra, Auckland and Northbrook Mills were started; and the loomage went up to 31,755 as against 15,213 ten years earlier. Albion, Angus and the Empire came into the field in time to reap the profits of the War period. And during the War, Caledonian, Lothian, Orient, Waverly, Craig and Bally were added and after the War, Nuddea and Megna, Cheviot, Benjamin (now Presidency). Birla and Hukumchand were the first Indian mills; and later followed the Adamjee, the Premchand Mills, Hanuman, Agarpara and Mafatlal Gagalbhai Mills. In 1921, Ludlow and the American Manufacturing Co. were added to the one American-owned mill, namely, the Angus.

The tables appearing in this volume, giving all the relevant statistics of acreage and crop, mills' consumption and exports of raw jute and exports of jute goods will afford a more complete and more accurate story of the development and expansion of the jute mill industry. It should suffice here in this descriptive note to point out that, if we put out of mind the last two or three years which form the period of the present depression, the history of the jute mill industry during the War and post-War period is one of unbroken progress. The area under jute increased from 31.69 lakhs acres in 1913-14 to 34.85 lakhs in 1929-30. Production expanded from 87.59 lakhs of bales in the pre-War year to 121.87 lakhs in 1926-27. The Indian mill consumption progressed with but few setbacks from 43.74 lakhs of bales to 62.46 lakhs in 1929-30. The export of jute and jute manufactures in 1925-26 amounted to Rs. 96.79 crores out of a total of Rs. 374.84 crores, from which there was a natural reaction. But so late as 1928-29 the figure stood at Rs. 89.25 crores. From that peak, it has come down to Rs. 33.11 crores for reasons which will be entered into in a later section of this article, but there can be no doubt about the vitality of this industry or its capacity to stand competition from rival goods. That the jute industry will be able to take the fullest advantage of the revival of world trade when it comes is one of the certainties of Indian economics.

THE CULTIVATION AND MARKETING OF JUTE.

Bengal holds a virtual monopoly of the production of raw jute. The two varieties

of jute mentioned in the previous section are grown exclusively in the deltaic region common to the mighty river systems of the Ganges and the Brahmaputra. Thus the crop is confined to Bengal, Assam and Bihar and Orissa, as also the Native State of Cooch Behar. Madras and Bombay possess little fragments of land suitable for cultivation of a fibre most akin to jute; and one or two mills are in existence there which utilise the product in manufacture. The normal area under jute is about 30 lakhs acres and [illegible] millions may be said to depend on its cultivation for their living.

Jute is most luxuriant in a loamy soil. The inundation of the Ganges and the Brahmaputra leave rich deposits of alluvial soil; and the cultivator is, therefore, spared the expense and troub[illegible] of providing manure. Once plan[illegible] crop requires little attention for a long time. The finishing stages, however, entail hard and very irksome labour. For to separate the fibre from the wood, the crop has to be steeped in water for two or three weeks. Retting, as this process is called, requires the cultivator to stand in water for long hours. The fibre is separated by beating the stems with wood. Then it is washed and dried and made ready for disposal.

The marketing of jute, so far as the cultivator is concerned, is not different in essentials from the marketing of other agricultural produce in India, though it must be remembered that jute is what is called a money crop for which the individual cultivator has little or no need. Moreover, the bulk of the demand comes from the indigenous mills, who have a strong and powerful organisation and for whom the buying of jute at the best prices is not a seasonal or an intermittent operation. The organisation of the mill and other interests has wide ramifications in the jute areas. The cultivator is, as a rule, in debt and the creditor has *de facto* the first claim on the produce. It may reasonably be suggested that jute passes from the cultivators through the hands of those who represent a blend of the moneylender and the agent acting on behalf of the urban interests. A multiplicity of middlemen is detectable here. The cultivator sells his jute through a *faria* to the *bepari*, a small dealer who acts on behalf of his principal, the *araldar* or *mahajan*. The *mahajan* sells to the agent of a mill; or there is one more link in the chain, the broker or baler putting in between the mill and the *mahajan*. Then the jute finds its way to Calcutta or Chittagong by rail, river or road to be consumed by the mills or exported abroad.

The place of the "futures" market in the organisation of the jute trade calls for special mention. Jute offers peculiar attractions to the speculator. Unlike cotton, for instance, which is grown in many parts of the world, jute is grown only in and about Bengal. Demand for the commodity is steady. But at the same time, uncertainties in regard to weather, conditions of the crop and extent of demand at any given time for jute products render it extremely fitted for speculative operation. There is more than one organisation in Calcutta which affords facilities for such operations. But the most important body is the East India Jute Association which has been formed mainly on the lines of the East India Cotton Association and it aims at discharging the same functions to the jute trade as the former renders to the cotton trade in the Western Presidency. The rules of the Association are so framed as to keep the business of its members as far removed from wager and gamble as possible. But the best futures markets of the world have not invented any infallible means of preserving the strictly *bona fide* character of the business; and in the case of the E. I. Jute Association also criticisms of an adverse kind have often appeared in the Press. It must be admitted, however, that the Association has succeeded in ensuring more of free play for the forces of supply and demand.

PROBLEM OF RESTRICTION IN THE JUTE INDUSTRY.

As indicated already in the earlier sections of this article, the last two, three years have been a trying time for the jute mill industry and those who are connected with it. Our exports of jute and jute manufactures have fallen both in volume and value. The acreage and production of raw jute have been practically halved as compared with two years ago. Prices are every day digging new record lows. And the jute mills are obliged to devise new schemes of restriction in a vain endeavour to keep pace with the fall in demand. The world economic depression has undoubtedly, a large place in the troubles of the jute industry. The movement of the chief agricultural crops like cotton, wheat, coffee, etc., has been restricted by the state of the consuming markets and this brings about a serious

decline in the foreign consuming demand for jute. While this factor may be properly appraised without any attempt to underrate its importance, it must not be forgotten that the position of jute in Bengal enables the mills to acquire a certain degree of immunity from world causes of an adverse kind. Possessed of a complete monopoly of the raw material and a virtual monopoly of those lines of jute manufactures in which the Calcutta mills are engaged, it should always be possible by the regulation of output to save the industry from severe losses or an altogether sterile working. Even in the early stages of the history of the jute industry temporary disequilibrium between supply and demand was not unknown. In fact, the Indian Jute Mills' Association was first formed to combat such a danger ; and there is no conclusive reason why the Association should not be able to render the same service on subsequent occasions.

Recent developments have been such that one is sometimes left wondering whether restriction will not be the perennial problem of Bengal's foremost industry ; for the need for restriction arose earlier than the present world depression and, for all that we can see to-day, may last even after the trade revival gets into stride. The reasons for the latter statement will be gone into in the proper place. As for the former, it is best to start with mentioning that restriction in the later history of the jute trade is the rule rather than the exception. We have shown in the first section of this article the vast expansion in the jute industry during the War period and the years immediately succeeding it. This expansion was due to the fact that the new entrants into the field did not see the place of the War in the economic demand for jute products during that period. When this was more clearly borne in on the jute mills they agreed to a scheme of restriction of output which lasted till June 30, 1929. The members of the Indian Jute Mills' Association had probably a variety of motives in abandoning restriction in that year. There was, first of all, the feeling that demand had expanded considerably since the agreement amongst the jute mills was first concluded. The clearest proof of this was to be found in the fact that the jute mills in Dundee and on the Continent of Europe had been increasing their loomage and their consumption of raw jute. Even at home new mills were being established ; and the obvious result of the continuance of restriction was that other producing units were reaping the benefits of prices which were maintained at that level only by the action of the Association. In these circumstances, the abandonment of restriction was an act of bare commonsense.

But reference must also be made here to the feeling in certain circles that the motive of the jute mills at that time was to hit the Indian mills which had just ventured into a field, till then practically an exclusive preserve of the European mills. Though it is not for anyone, except those in charge of the mills to deny such allegations, yet it must be remembered that this contention has value and relevance only in a controversy in which the main issue is whether the Indian mills harmed in that way should avail of the earliest opportunity to return tit for tat. Be that as it may, after a somewhat prolonged consideration, the jute mills decided in November, 1928, to increase the working hours from 54 to 60 hours per week. But the new arrangement was to begin from July 1, following. The change was not very old before it became apparent that it could not be persisted in except at the peril of the industry itself. The demand for short hours was widely made. The mills took time to recognise the position. And even after the recognition came, it was not easy to come to an agreement as to the remedies. Finally it was decided to revert to 54 hours. The inadequacy of this measure suggested the closure of the mills for three weeks in the latter half of 1930, the exact time to be determined by each mill and, of course, duly notified to the Association. It is curious how the need for restriction grew with every new measure designed towards that end. The reduction of working hours to 54 led to the closure of the mills for three weeks. And the closure of the mills after it ceased, was followed by a further restriction of working to 40 hours per week. Then it was decided to seal up 15 per cent. of the looms of every member of the Indian Jute Mills' Association. The remaining 85 per cent. of the looms running 40 hours per week is equivalent to the full complement of looms working 34 hours per week, a reduction of 43 per cent.

It may be thought that so drastic a restriction of working cannot fail to produce better conditions. But difficulties arose at this stage which but for there being a late and unexpected development are the same as those on which all schemes of restriction have foundered. The very severity of the restriction was an inducement for those who are outside its scope

to increase their production. The non-member mills which owned about 5 per cent. of the total loomage of the industry increased their equipment and working hours. Their overhead costs were lower and their margin of profits increased. The sight of this development tempted even members of the Association to desert its ranks. And so a position was reached in which the output of the non-restrictionists amounted to as much as 14 or 16 per cent. of the total production.

These developments brought matters to a head. While the need for restriction was becoming more and more urgent, the Association mills exhibited a decided reluctance to impose any more restrictions on themselves unless they had the whole industry with them. This was interpreted, and rightly, by the non-Association mills as a bid for their support. And attempts were made to raise the bid. Protracted negotiations and increasingly stiffened attitudes were the result. The markets all the time were going from bad to worse ; and interest in the question spread to the general public as the ruin of the jute industry spelt the ruin of the whole province and even interests far transcending the province. A vigorous press agitation was in progress to induce the Government of Bengal to interfere in the public interest in the negotiations between the two sections and either bring about a settlement or impose one by legislative enactment. His Excellency the Governor took a keen personal interest in the negotiations, the more so, as he was opposed on principle to the interference of the State in the affairs of an industry. But the final outcome was not exactly a compromise, as may be seen from the points which were agreed on in the second conference of jute interests which was held at the Government House under the presidency of Sir John Anderson himself.

The main points settled were:

(1) That the deposit money which the Adamjee mills forfeited on account of its secession from the Association should be refunded.

(2) That the Association mills should work 40 hours a week, while the non-Association mills should be free to work 54 hours a week.

(3) That the latter should be allowed to work their full complement of looms while the former are to have 15 per cent. of their looms sealed up.

The restriction agreement between the Association and the non-Association Mills brought about through the intervention of His Excellency Sir John Anderson worked smoothly through the year, so far as the relations between the two groups of mills are concerned ; but by the end of the year under review it was clear that the restriction scheme called for a revision. For the foreign competitors of the Indian Mills were able to increase their share of the market ; and this was seen in the steadily increasing exports of raw jutes from this country. The foreign mills had the advantage of working to full capacity and of under-quoting the Calcutta mills because of the low overhead charges. Just as in previous years the benefits of the restriction of production by the Indian Jute Mills Association went largely to the non-Association Mills, in the year 1933-34 the benefits of restriction in the Indian mills went to the non-Indian Mills. Though it is generally believed that there has been no expansion of productive equipment in foreign countries, it must be admitted that it is absurd to continue a restriction scheme which deprives the restrictionists of the full benefits thereof and undermines their competitive capacity by higher costs of production. The Indian mills fought shy of revising the restriction agreement ; for it is quite conceivable that increase of working in India might involve all producers alike in a common ruin. But the rate at which the exports of raw jute increased left no room for doubt that, unless the Indian jute mills make their competitive power felt abroad, the foreign mills would go on increasing their output. The decision that was ultimately made to unseal 15 per cent. of the looms does not fall within the year under review but must be mentioned here in order to make clear that the scheme proved unworkable and had to be modified.

The large problems of the jute trade and industry were much to the fore during the year. The Bengal Government appointed a committee of enquiry for examining the conditions of jute cultivation and marketing : but the Government are yet to take action on the recommendations of the Board.

INDUSTRIAL SECTION:

THE INDIAN TEA INDUSTRY

EARLY HISTORY AND LATER DEVELOPMENT

Tea, like Jute, is an industry of comparatively late origin. It had, however, existed in China from the earliest times where it was in use as a beverage in the eighth century. It was mentioned in a letter which an Englishman in Surat wrote to his friend at home in 1617. In 1658 the *Mercurius Politicus* had a notice showing that a consignment of tea arrived in England, which is probably the earliest arrival. Pepys' reference to it in 1661 as a "Chinese drink of which I have never drunk before" suggests a more common usage of the new beverage. But it was not until 1720 that the East India Company imported a large volume of one million pounds which was retailed at 30 sh. the lb. In 1773 the Company had such excess stocks, that it obtained permission to export them to Boston; and this, incidentally, led on to the famous Boston tea party. By the year of Trafalgar the imports came to 7½ million lbs.

In the earlier stages China had a monopoly of the tea trade; and probably the tea industry would not have been established in India, but for the fact that the Charter Act of 1813 transferred the monopoly of the tea trade from the Company to the Crown. The Directors naturally looked about for another source of supply for this lucrative trade; and their determination in this matter was strengthened by the knowledge that the plant could thrive under varying conditions of climate and soil as those of Brazil and Java, St. Helena and Sumatra. The Government of Lord William Bentinck appointed a Committee in 1831 to enquire into the possibility of importing plants from China and developing plantations in the hilly tracts. The lower hills and valleys of the Eastern Frontier and the Himalayan range and the Nilgiris were obviously fitted for the cultivation of tea. But for a long time, the pioneers of this enterprise were altogether ignorant of the fact that, far from being an exotic plant, tea was part of the flora of Assam. Scepticism in the value of the discovery persisted for a longer time than we might deem credible. But the supporters of the indigenous plant did not have to wait long for their success. For by the middle of 1838 they were able to announce that 8 chests containing 350 lbs. of tea had been shipped to England. Within a year Indian tea was definitely accepted to be a sound commercial proposition; for before that year was formed the Assam Tea Company which was the first and is even now about the largest tea company in India. The first auction in Mincing Lane was held in 1839; but the quality was adversely commented on by the brokers. Efforts to get the Chinese to teach the Indian cultivators failed, probably through the jealousy of the former. But the industry progressed despite these discouraging signs. By 1866, there were 30 gardens with about 10,000 acres, 8,000 operatives and 1.7 million lbs. of output. Before another decade was out there were three times as many gardens; the acreage increased by 80 per cent. and the production had multiplied ten times. By 1906, the acreage increased to 50,000 and the output and employment to 12.4 million lbs. and 64,000 operatives. The corresponding figures for 1915 are 53,178 acres, 17.09 million lbs. and 42,300 operatives.

The fall in the number of operatives which is in strange contrast to the increase in acreage and output leads us to a mention of the patent devices of Mr. William Jackson and the planting reforms of Mr. Christison. The former invented the rolling machine which obviated the repugnant and dilatory processes of rolling the tea by hand and tampling it to dust with naked feet. The latter evolved the measures necessary for preventing the erosion of soil on steep hill surfaces and for resisting the effects of drought.

These inventions enabled the Indian tea industry to get far ahead of China. And the

pace of the later development and expansion may be judged from the folowing figures:

TEA PRODUCTION IN INDIA.

		Acreage in 1,000 acres.	Production millions lbs.
1901	...	524	201
1921	...	709	274
1924	...	714	375
1927	...	756	390
1928	...	776	404
1929	...	788	432
1930	...	805	391

Space forbids any detailed sketch of the progress in South India or in other chief producing countries of the world. But it may be mentioned that the first experiments in tea planting in Ceylon were not encouraging. The greatest fillip was given by the disaster which overtook the coffee plantations through the appearance of a pest. Attempts were made to replace coffee with cinchona and then tea. The latter was an unqualified success. By 1880 the export was 162,000 lbs. Five years later it exceeded 4 million and in another five years it reached 45.8 million lbs.

The acreage increased from 406,000 in the beginning of the century to 450,000 in 1929; and the latter, it must be remembered, does not include small holdings which are estimated to be about 20,000 acres.

In addition to the great production of India and Ceylon, Africa contributes an increasing amount. The figures for production in 1928-29 will be of interest:

		Area in acres.	Production in 1,000 lbs.
Union of S. Africa	...	2,000	800
Nyassaland	...	8,900	1,745
Kenya	...	5,600	150

Natal, too, has a tea industry of long standing, but as by far the greater part of it is taken up in domestic consumption its production is of little importance to other producers. Nyassaland exports practically the whole of its output ; Kenya is understood to have expanded the acreage very largely since 1928-29. Its products are of medium quality which should be useful for blending purposes. Malaya has conducted some successful experiments in tea cultivation ; and it is supposed that there are considerable possibilities.

China, as a producer of tea has been pushed more to the background. The unhygienic methods of production have allowed the change of taste in the foreign consumer ; and Chinese tea is now principally a peasant production conducted for the individual consumption of the cultivator. The following figures will show the deterioration:

EXPORTS OF TEA FROM CHINA, IN MILLION LBS.

		Black and Green.	Brick and Tablet.
1899	...	153.6	71.2
1913	...	109.2	82.2
1923	...	98.0	8.8
1927	...	77.6	38.6
1928	...	76.8	46.6

The principal rivals to India and China are Java and Sumatra. The origin of the industry in the Dutch East Indies was about the same time as in India or perhaps a little earlier. But production on a large scale had to await the import of plantlings from India. In 1911 Sumatra had 500 acres. By 1928 Java claimed 235,000 acres as against 207,000 acres in 1924 and Sumatra 53,000 as against 29,000 acres in 1924. In addition Java had 83,000 acres under native growers, of which 66,000 acres were in bearing.

Total production from the world's principal sources is given below, as published in the annual Calcutta Tea Market Report of Messrs. J. Thomas & Co.:

	1927 Million lbs.	1928 Million lbs.	1929 Million lbs.	1930 Million lbs.	1931 Million lbs.
Northern India (total season's crop) ..	336¼	341	372	331	335¼
Southern India (total exports) ...	47½	48¾	52¼	47¼	49½
Ceylon (total exports) ...	227	236	251½	241½	247
Java (total exports)	126¾	134	136¼	135	145
Sumatra (total exports) ...	12½	19	22¼	22¼	26¼
Total	755¼	779¼	834½	777¼	803

CULTIVATION AND MANUFACTURE.

Tea seeds take about eighteen months to grow to the stage at which they are fit to be transplanted. The tender shoots are not interfered with during that period ; and then

they are transplanted at the commencement of the rainy season into holes three feet apart and two feet deep. An acre of land can grow about 2,900 plants. As the plants require copious rains and complete drainage, too, in order that the water may not be in contact with the roots for a long time, only hill slopes are suitable for tea cultivation. Manuring is applied heavily direct to the roots. Weeding and hoeing have to be frequent, and nitrogenous green crops are grown in between the rows immediately after and before the rains. The tea plant left to itself can grow to the height of an ordinary tree; but the plant is kept by pruning to the height of two to three feet, both to force more of tender foliage and to facilitate easy plucking. The picking commences in the third year; and the annual outturn per acre varies, according to the age of the plantation from two to four maunds. The various kinds of teas referred to in the markets indicate whether a particular kind is a tender leaf or a coarse shoot. The buds yield "orange pekoe" and "broken orange pekoe"; "pekoe" is derived from the tender leaves; and "pekoe souchong" is the product of the coarser leaves.

Picking has to be carried on by manual labour, particularly by women "who with quick eye and deft fingers rapidly choose and pluck the leaves, right and left hand operating simultaneously." The leaves are then taken with the minimum delay to the factory where they pass through several stages which are, in their order, withering, rolling, fermentation, firing, sorting and finally packing. The first stage consists in spreading out the leaves in thin layers for about 20 hours to develop and increase the enzyme. This process is so important as almost to determine the quality of the final product. The importance of this process and the details of the subsequent stages of the manufacture are best described by the Imperial Economic Committee:—

"The leaves are so spread as to allow of free upward and downward circulation of the air. Where climatic conditions allow, the sides of the building are open to the outside air. In some districts, owing to the humidity, it is necessary to wither the leaf in closed rooms, through which carefully controlled currents of air circulate, the object being not to raise the temperature, but to counteract the humidity of the atmosphere.

"The process of rolling twists the leaf and breaks open the cells containing the properties that give strength and flavour to the final product. The juices liberated by rolling form, when dry, a soluble extract which is released when the tea is brewed. The rolling may be so carried out that a proportion of the leaf is broken and goes to form, without any subsequent cutting, part of the "broken" grades which are now-a-days preferred for their superior liquoring quality.

"After being rolled, the leaves are spread out and left to ferment. Here, again, it is important to arrest fermentation at the right moment, for if it goes too far, quality and flavour will be spoiled. The fermented leaves, still damp and sticky, are now spread on the perforated or wire trays of a firing machine, and submitted to a hot air current for a short period during which they assume the black appearance with which everyone is familiar. In the course of the processes enumerated, the leaf loses 75 per cent. of its weight.

"The tea is now known as "made" tea, and is next vibrated through sieves of varying mesh and sorted into grades. It is important that the leaf in each grade should be even in size and true to type. Although there are no fixed standards for each grade, the differences between them are well known on the market and any mixture is soon detected. The sorted tea is then packed by machinery into chests and half chests. These are lined with lead or aluminium foil to protect the tea from the atmosphere, to which it is highly sensitive. Even so, tea is sometimes affected by juxtaposition in ships' holds with cases of fruits such as oranges."

MARKETS FOR TEA.

Alike in point of production and consumption, the tea industry is an industry of the British Empire. It lends itself to treatment as an Empire industry, as no other industry does. For, though, as we have seen earlier, the production of tea is spread over various parts of the world, over 70 per cent. of that tea is produced and nearly 70 per cent. of it is consumed within the Empire. Over two-thirds of the entire capital in the industry is owned by its citizens. All the machinery employed in India and Ceylon is of Empire origin. Even the tea chests are imported from Empire countries.

But what is most important in this context is that the Empire is both the producer and the consumer of the greater part of the world's annual output.

The world export position is summarised

in the following table taken from the Report of the Imperial Economic Committee:

WORLD EXPORTS OF TEA IN 1928 AND 1929 (CALENDAR YEARS) IN MILLION LBS.

	1928.	1929.
India	355.5	380.4
Ceylon	236.7	251.5
Nyassaland	1.4	1.7
South Africa	.1	.1
Total from British Empire	593.7	633.7
Java and Sumatra ...	153.5	161.3
China (Black & Green) ...	76.8	73.0
Japan and Formosa ...	33.4	32.8
Total from foreign countries ...	263.7	267.1
Total from all countries	857.4	900.8
Empire percentage ...	69.1	70.3

The above tables wil bear out the statement with which we started that the industry is essentially an Empire industry and is peculiarly fitted for treatment as such. Unlike other Empire products which have yet to win and secure their place in the markets of the United Kingdom, Tea has an assured place. Of the Empire countries, Canada gives a negligible part of the patronage to the non Empire product. New Zealand is a slowly expanding market, with Ceylon taking the lion's share of it and Northern India coming in for a small bit. Australia is giving more than 50 per cent. of her patronage to Java and relegating the Empire producers, and particularly India, to an insignificant place. Ceylon which exported appreciably more than Java in the earlier years has lost ground considerably; and the relation of Australia to the Empire tea trade is less satisfactory from the standpoint of Empire producers. Outside the Empire, the United States of America derives its importance as potentially an even bigger market than Great Britain. In that country, Ceylon has the foremost place with Northern India following and Java as a somewhat distant third. But even if it were otherwise, the problem, so far as America is concerned, would be one, less of gaining a larger place for the Indian or Empire product than of securing an expansion of consumption in a market on which all the producers have been looking wistfully for a long time.

We may, therefore, take it that the principal problems with which the tea trade of the Empire is confronted are firstly, to secure a larger share, if not the whole of the British market, secondly, to explore the possibility of an Empire preference for tea, particularly from Australia and thirdly, to decide what to do in regard to the American market.

In regard to the first, it may be remembered that a year ago there was little or no prospect of the reinstitution of the preference for Empire tea which Mr. Churchill abolished when he was last Chancellor of the Exchequer. But the British Budget for 1932-33 has granted a preference of 2d.; and the question can no longer be regarded as an issue calling for examination or judgment. But it must be remembered that according to the *Financial Times* whose writings were cabled out to India early in June, 1932, the preferential duty has not altered the position of Java in the British market and that Empire tea has not derived any appreciable advantage. It is unthinkable, that the British consumer will consent to bear a heavier burden for the sake of the producers of India and Ceylon. And so we are thrown back again on the old problem of securing a voluntary and, for that reason, a more effective and a less objectionable, preference. There is no doubt that there is a large body of sentiment in Great Britain which favours the expansion of Empire tea at the expense of the non-Empire product. All expert committees which have gone into this question are practically unanimous that Empire tea has every advantage over the rival products and that, if only the retailers could be induced to sell pure Empire blends, the virtual exclusion of non Empire tea could be achieved without any kind of State action like the imposition of a preferential duty.

The Imperial Economic Committee which issued its eighteenth report on tea early in 1931, is positive that the failure of Empire tea to make progress commensurate with its quality and other advantage is due almost solely to, what for lack of a better term may be called, the inertia of the interests concerned. We may appropriately make the following extract from their report: "Tea owing to the superiority of the Empire product, is a particularly favourable subject for voluntary preference and offers to those who cater for the preference an exceptional opportunity for developing their trade in what is one of the staple articles of their business. There can be no reason but mere oversight for the fact that a well-known London store, which prides itself on its display of Empire product should distinguish its various blends

by nothing but a series of numbers. To the same reason may also be assigned the fact that a well-known multiple-shop organisation which for some time has put up a thoroughly good household blend consisting entirely of Empire-grown tea should have only in the last few months attempted to exploit the publicity value of the Empire origin and does not even yet exploit this publicity value on the packet itself. For there is no doubt that, provided the article is good, the declaration that it is the produce of the British Empire now has definite publicity value in the United Kingdom."

To turn to the American market, it is often overlooked that though the wealth and population of that country make it a very alluring market, the actual experiences are highly discouraging. In this context, the contrast between the United Kingdom and the United States is striking. On the one hand, the United Kingdom has always been the best actual market for Indian and other Empire tea ; and on the other, the United States have been regarded for some time as potentially an even bigger market. In the former, the little advantage which is yielded by a preferential tariff is only fitfully afforded. The market is showing unmistakable signs of saturation. The figures of retained imports show a consumption per head of five cups of tea per day. And any increase in the British offtake of tea would depend solely on the increase of population. The American market presents a marked contrast to the British. While the latter consumed about 424 million pounds in 1929 and increased it to 439.2 million pounds in 1930, the United States, a far bigger land, consumed only 93.4 million pounds in 1929 and reduced its consumption in 1930 to the level of 84.4 million pounds, out of which green tea is 32 per cent. against 36.4 per cent. in 1929.

In spite of such marked contrast there are still many in the trade who are not sure whither to divert their fresh efforts for increased sales of tea. It is true that the United Kingdom which is the biggest market for Indian and other Empire tea has very naturally reached the utmost limits of expansion and that, any further increase in the British consumption of tea will have to depend on the purely natural factor of normal increase in population. But the United States, it must be remembered, has proved singularly unresponsive to all the coaxings of the tea propaganda committees. Far from there being any increase in the spread of tea drinking in the United States, there have of late been distinct signs that the vogue is on the decline. In the earlier stages the intensive campaign in favour of Indian tea in the United States bore immediate results. Imports of Indian tea increased from £12 million in 1923, to £15 million in 1924 and £18 million in 1925. But at that figure it has remained stationary since and what has been said of Indian tea might also apply to the Ceylon product. While the proportion of Indian and Ceylonese tea in amount imported into the United States has increased the total consumption has hardly varied ; and India and Ceylon have gained only at the expense of China and Japan, which in pre-war years provided for 70 per cent. of the requirements of the United States. If we consider the consumption of tea per head of population, the present consumption of .75 lbs. per head compares very unfavourably with the figure of 1.32 lbs. which was the average fifty years ago. This might perhaps be explained by the large annual influx of new immigrants to whom tea is an altogether strange drink. But so large a difference as that between 1.32 pounds and .75 lbs. must point to the possibility that there are rigorous limits to the popularisation of tea as a beverage amongst the Americans. It is not quite impossible, fantastic as it might seem, that the Boston tea incident still has its hold on the imagination and sentiments of a large number of American citizens.

In these circumstances, it is natural that the wisdom of incurring further expenditure of money in developing the American market should have been a subject of discussion among the tea associations of India and Ceylon. Those who have specialised in advertisement and what is called in an expressive Americanism, high pressure salesmanship would, of course, insist on a continuance of the campaign in America. But it is prudence not to make an unduly heavy outlay on this when the tea industry has other fields which can yield more immediate results.

Before leaving the question of markets for tea reference must be made to the possibilities for increased consumption which India itself offers. According to certain authoritative estimates our internal consumption of tea was 57 million lbs. in 1929-30. Such increase points to the fact that with the development of the purchasing power of the masses in India, a vast expansion of consumption is bound to result. The Tea Association would be well advised not to leave this as a matter of purely natural growth ; but to take it up in an active way. With Indian consumption at such a low level the

tea industry was not in so compelling a need for restriction of output. And as for the present situation it will ultimately prove to be a blessing in disguise as without a critical situation it would be difficult to rally the Empire to the help of the industry. Once the Empire markets are fully secured for the Empire product, efforts might then be made to restore the voluntary basis for Empire preference.

MARKETING OF TEA

The system of marketing which obtains in the tea trade is so peculiar that no apology is needed for a detailed and comparatively lengthy account of it. A considerable portion of the tea crop of India and Ceylon comes to Calcutta and Colombo for export to the consuming markets. As the gathering of tea is a seasonal operation in Northern India the producers have always felt nervous of throwing the output of the whole season on the market at the same time ; and by common agreement the crop is disposed of in weekly auctions. But the real centre of the tea trade is London not only because the United Kingdom is the biggest consumer of tea, but it is the entrepot of the tea, as of so many other, trades. The London market is, therefore, the nerve centre which determines the volume of demand at any time and the prices at every auction. The preliminaries to the London auctions will be described in detail later on. The tea is despatched by the garden managers to the local ports and the managing agents of the company owning those gardens concerned consign it to their firms in London who, thereupon, became responsible for the marketing. There is, of course, the usual movement of the goods from the docks into the warehouses where they are held in bond till the payment of the duty. Barring the relatively small lots of China tea which are sold by private treaty, the bulk of the goods is put up for public auction. In such auctions, there are selling brokers who act for the managing agents and the bidding is done by buying brokers who are intermediaries acting for the grocers and dealers. The selling brokers draw samples from each break, test them and issue catalogues. There is an interval in which samples are exhibited in the sale rooms, selling and buying brokers form their idea of the value of each break, and the former receives instructions from their principals as to whether they are simply to sell at best or whether there is a given price below which they should not sell at all.

The practice in the London tea auctions which are the most peculiar feature of a peculiar system of marketing is described in the report of the Food Council of the United Kingdom:

"In addition to acting as selling agents on behalf of the producer, selling brokers also do a certain amount of business on behalf of purchasers whose orders they have received before the auction. These orders are placed through the selling brokers' 'market men,' who appear in the box with the selling brokers, and bid precisely as do other persons in the room. We have been informed that the market man does not disclose his top price or his orders to his principal, but buys as cheaply as he can. If he disclosed the orders given to him in confidence by the buyers or bought at prices higher than the market he would quickly lose his business. Business of this character is principally done on behalf of smaller shippers who supply Continental orders. The market man receives a salary from the selling broker, and is therefore his employee, but he also receives ½ per cent. commission on purchase, this ½ per cent. being additional to the 1 per cent. received by the selling broker. Although on the face of it, it may appear unlikely that these market men can act in a dual capacity without prejudice to the interests of either selling broker or buyer we have received no evidence to the effect that the arrangement operates unfairly to either party.

"Generally, the selling broker acts in the interest of the producer, and his duty is to obtain the highest price for the teas placed on the market by producers in return for a remuneration of 1 per cent. on the selling price. We have received no complaints against selling brokers. They appear to carry out their duties with satisfaction to the trade and without detriment to the consumer. In fact, they form an essential part of the organisation for placing tea at the consumer's disposal.

"The immediate purchasers of most of the tea auctioned at Mincing Lane are the buying brokers. They number about a dozen and are members of the Tea Buying Brokers' Association of London. Six of these firms have been described to us as relatively big firms. Buying brokers do not normally buy tea to hold but resell later to dealers, blenders, and merchants at a commission of ½ per cent. In practice all purchasers of tea who do not give their orders to selling brokers' market men (a procedure which is described above), buy tea through buying brokers, except that occasionally as a con-

venience distributors' representatives will bid in the room if their buying broker is not present or is occupied, but the business is always put through the buying broker, and the buying broker is paid his commission of ½ per cent. We have been informed that during the last 40 years there has been a change in practice, and buying brokers now obtain a bigger proportion of the orders as compared with the selling broker than was once the case. Although the auctions are public, and nominally anyone is entitled to bid, it has been stated to us that if a bidder, not a recognised buying broker, were to enter the market, or, if one of the big distributors were to instruct his buyer to bid at the market, not through the intermediary of a buying broker, the buying brokers would 'run' the price with the object of securing that all sales of tea should pass through their own hands.

"According to the evidence given to us by the Tea Buying Brokers' Association of London, buying brokers assist the trade (1) by selecting suitable teas in public sale for their clients and submitting samples and valuations to those clients, (2) by executing part orders for a parcel of tea and taking over the balance of the parcel, thus enabling the smaller dealer to obtain the tea he wants, (3) by executing confidentially orders for clients who very often have no time to attend the sale themselves, (4) by buying as cheaply as possible in the sale.

"The bidding for tea is done in pence and farthings per lb. and the same price is frequently offered by many buyers, none of whom may be willing to raise his offer. The parcel then goes to the first bidder, and it will be of advantage to other buying brokers who need supplies to repurchase the tea from him and divide the commission with him rather than to offer an extra ¼d. per lb. After purchase of a particular 'break' other buying brokers therefore frequently call to the successful bidder, and generally, if not invariably, the bidder divides up his consignment at the purchase price, sharing the commission of ½ per cent. with the other buying brokers. In effect, therefore, two sales are going on simultaneously in the same room.

"It often happens, however, that buying brokers in anticipation of orders from clients in the near future, will buy tea for which they do not possess orders. These teas are placed on a 'bought-over list' and, in fact, whatever quantity of tea is not resold by the buying broker in the auction room is normally placed by him on his 'bought-over list.' These lists are issued daily, and from them dealers, blenders and other distributors select the quantities and kinds of tea which they require.

"We are informed that many firms rely entirely on the 'bought-over list' for their supplies, and it is claimed that this eliminates much competition from the auction room."

The system of marketing detailed above clearly suggests certain lines of adverse criticism. The buying broker seems to be, to all intents and purposes, an unnecessary middleman who tends only to increase the price of tea for the ultimate consumer. Secondly, it requires an uncommon effort of imagination to believe or realise that the selling brokers' "market men" can act in a dual capacity and be true to his duties both to the buyer and seller all at the same time and in the same transaction. Thirdly, though this is not a necessary result of the marketing system the buying brokers are only a dozen in number and this has led to the remarkable concentration of buying in a few hands. It is said that 70 per cent. of the distributing trade in Britain is in the hands of four combinations and this is obviously a dangerous state of affairs. The defects which have been mentioned above have found able apologies at various times. Of the buying broker it is said that he is a specialised middleman whose expert service must be of great advantage to his principal.

The selling brokers' "market men" are given the shelter of the ingenious contention that complaints have rarely been made against them. It is probably overlooked that in a trade whose control has been concentrated in a very few hands—and it must be remembered that the buying brokers control also many companies owning large tea plantations- it is not to be expected that any serious charges will be made or satisfactorily substantiated. But, committees which have required organisation of the Tea trade have stressed the need for a producers' combination which can act as a counter-weight to the combine that actually obtains on the demand side. We must mention here with not a little regret that there has been so far no evidence of an anxiety on the part of the producing interests to improve a system of marketing which cannot commend itself to the ordinary man on grounds of commonsense.

TEA RESTRICTION

Tea interests had less difficulty in arriving at a scheme of restriction than other interests. By the end of the first week of December, 1932, it was announced that complete agreement had been arrived at

among the representatives of the principal producing countries regarding the measures to be taken to bring about effective restriction. The Associations represented were the Indian Tea Association (London), the Ceylon Association in London, the South Indian Association, the British Chamber of Commerce for the Netherlands East Indies and the Amsterdam and Java Tea Association.

As may be easily imagined, agreement among the associations represented in the London discussions marked only the first stage in the progress towards the adoption of restriction. The subsequent stages comprised a referendum in each country to the producing units, a request to the Government that they take upon themselves the responsibility of enforcing the export quota and the devising of the requisite machinery on the part of the Government. Likewise, the producing units had also to agree amongst themselves as to the share of each producing interest of the total permissible exports.

So far as India is concerned, the preparation for the referendum revealed an initial difficulty which, though successfully overcome must have seemed serious enough when it was first encountered. It was reported that the South Indian Tea interests insisted that a due allowance must be made in the scheme for the large areas which will come into being before long. It was natural that the sponsors of a scheme of restriction did not give any special consideration to new production, as it is of the essence of restriction that even actual capacity should be reduced, not to speak of affording scope to potential sources of production. But to most South Indian estates, it would appear that the picking of young clearings and the marketing of their produce are vital to the very solvency of the concerns. The claims of South India were duly recognised and allowance for young clearings were made possible by altering the restriction from 15 to 18¾ per cent. This compromise enabled the Indian Tea Association, Calcutta, to formulate the proposals and prepare for the referendum after which alone India could be said to have accepted or rejected the restriction scheme. A special note on this subject by the Indian Tea Association, Calcutta, had the following summary of the proposals to which the London organisation gave their initial assent:

(1) That the exports of tea from the producing countries be regulated in order to restore equilibrium between supply and demand.

(2) That the Government of the respective countries will undertake to prohibit exports in excess of the quotas agreed upon.

(3) That the standard upon which regulation is based shall be fixed on the maximum exports from each country reached in any of the three years 1929, 1930 or 1931.

(4) That the commencing of regulation for the first year shall be 85 per cent. of the standard export, and that a Committee shall be set up representing all the Associations interested, which Committee, taking into due consideration stocks and the price of tea, shall fix—prior to the expiry of each year—the figure of regulation for the following year.

(5) That the agreement shall be for a period of five years.

(6) It will be part of the agreement that the existing tea areas must not be extended during the said period of five years except in special cases when the existence of an estate would otherwise be imperilled, and that no further areas must be sold or leased out for tea cultivation and that no planting of tea must take place on land now carrying other products. Under any circumstances such extensions and new planting are not to exceed one-half or one per cent. of the present total planted tea area of each territory and the respective Governments will be asked to make a binding regulation to the above effect. The conclusion and continuation of the agreement will be made dependent on the enforcement of the regulation by the Governments of all the territories concerned.

The Indian Tea Association, Calcutta, has elaborated the principles according to which the restriction will be applied to individual producers in India.

It will be remembered that the standard upon which regulation is to be based is the maximum exports from each country reached in any of the three years 1929, 1930 and 1931. In the case of India, however, the financial year will apply instead of the calendar year ; and the following table taken from the note of the Indian Tea Association shows the regulation year, the maximum exports and the export quota for the first year of the scheme for each country.

Country.	Year.	Standard Exports.	Expt. Quota of 85 p. c.
India	1929-30	382,594,779	325,205,563
Ceylon	1929	251,522,617	213,794,225
Java	1931	145,028,631	123,274,337
Sumatra	1931	26,533,397	22,553,388
		805,679,424	684,827,513

The amount of tea India would be entitled to export in the first twelve months following its adoption would be 325,205,563 lbs. The

principles on which the allocation is to be made are outlined as under:

(*a*) That for the purpose of the scheme India should be treated as one unit.

(*b*) That allocation should be made at the same percentage throughout.

(*c*) That the estate is to be regarded as the unit for purposes of calculating the export quota.

(*d*) That the basis on which allocation should be made should be the maximum crop of each unit for any of the years 1929, 1930, 1931 or 1932, increased by allowances on a definite scale for young clearings.

(*e*) That export rights should be transferable and saleable.

One question, however, of great importance, which is pertinent to the scheme of restriction but is not covered by it, is that of restricting the output within each country. The authors of the scheme were evidently concerned solely with conditions in the export markets; and they seem to have thought that if supplies in the foreign markets are resrticted and foreign markets are insulated from the producing areas, a rise in export prices can well be secured. If the export quotas are fixed and the duty of enforcing them is taken over and discharged by the Governments of the respective producing countries, there is every reasonable prospect that conditions in the export markets will be definitely better. But one cannot be quite sure that unregulated production in the plantations will not have a strange sentimental effect on the consuming markets.

The Indian Tea Association, Calcutta, are guarded in their observation in this regard:

"The present proposals must involve some decrease in the total output, but it must not be assumed that this need be reduced to the amount of the quota for export, as consumption in India has to be provided for and this can be arrived at on the basis of past averages plus a liberal allowance for increased consumption."

We do not know on what evidence the Association based its expectations of an increased internal consumption. But it is possible to hope that with the export markets closed for their surplus production, the Indian tea producers will at last be forced to devote more of their attention to the development of the Indian market.

The 1933-34 season has more than justified the hopes that the period of unrelieved depression is at an end and that improved times were in view. The international scheme for the regulation of exports came into being in May, 1933, being made retrospective from April 1. The scheme has worked with the utmost smoothness and success. The scheme of Restriction of production also came into operation, limiting the total production from North and South India to aproximately the requirements for internal consumption. A large number of producers voluntarily agreed to this, and the figure 59 million pounds was fixed for the whole of India against an estimated consumption of 51 millions.

The Regulation Scheme affords a period of recovery from the disastrous years of 1931-32, but it is cannot be a lasting solution of the Tea Trades' problems and difficulties. Efforts must be increased for the opening of new markets and expanding the consumption of tea all over the world. The distribution of good tea to the public at a reasonable price is the chief need of the tea world as a whole.

The small increase in the release of Tea for export for 1934 seems likely to maintain a high level of prices during the coming season, which high level is not healthy for the improvement of the trade. Unduly high prices merely act as a strong encouragement to competitors on the one hand, and a definite check to consumption on the other.

The continued necessity for some form of regulation of production has occupied the attention of producers. For 1934, it is hoped to continue on the same basis as 1933, *i.e.*, a voluntary agreement to restrict outturn to an addition of 12 per cent. over and above the quantity allowed for export. It is estimated that 60¾ million pounds will be available for consumption in India. During the year, there was a general improvement in the price of Common Tea. All really fine teas sold well. The standard of quality required has been a high one, and buyers have shown great discrimination between good teas and the best. Medium Teas had a difficult market with prices often only a fraction above Common Teas. A notable feature of Internal Consumption sales was the ready market at different times of the year for practically all types of Tea.

There has been a considerable increase in the trade with Australia during the year, in spite of a reduction in available supplies. Shipments to New Zealand have been the largest hitherto recorded. This is all the more gratifying in view of the fact that Ceylon still enjoys a preference of .67d. owing to the absence of the surcharge on

Ceylon Teas entering New Zealand. Exports to the United States of America show an appreciable decrease. Economic and political conditions, especially during the early months of the season, made trade with Continental Ports very uncertain.

During the year, some 49 million pounds have been sold in the auction for Internal Consumption. Throughout the year, although prices have fluctuated considerably, there has always been a keen demand.

There were many changes during the year in the working of the Tea Cess Committee. The rate of Cess was raised to the maximum allowed, *viz.*, annas 8 per 100 lbs., being levied on Export Teas only and not on all teas sold. The much-talked-of scheme for a Central Packing Factory has been finally abandoned. The Tea Cess Funds are being devoted exclusively for propaganda. As a general policy, it is proposed that all producing countries should join in a combined campaign of advertising good Black Tea, rather than tea from a particular country of origin. At present this policy has been definitely adopted with regard to propaganda in the United Kingdom, and it is hoped that in the near future it will be extended to all countries in which Tea is to be advertised.

INDUSTRIAL SECTION:

THE SUGAR INDUSTRY

The outstanding features of the Indian sugar industry since the imposition of the protective duty and its reinforcement by a 25 per cent. surcharge at the time of the emergency budget, are, firstly, an increase in the number of factories built and worked on modern lines and a fillip to the cultivation of sugarcane in lands suitable for this crop. There were naturally changes of a more technical nature both on the industrial and on the agricultural side. On the agricultural side, there is first, the increase in the area under sugarcane. The yield of raw sugar at 3,305,000 acres in 1932-33 shows an increase of 11.2 per cent. over the previous year and 19.3 per cent. over the average of the preceding five years. Nearly all the provinces have had an increase in the area under sugarcane, though in the case of Bengal an increase is noticeable in 1932-33, not as compared with the previous year, but with the average of the preceding five years. Among the more important provinces Punjab has the largest increase of 17.1 per cent. in 1932-33 over 1931-32 and the United Provinces comes next with an increase of 12.3 per cent. and an acreage of 1,789,000. The yield of raw sugar during 1932-33 is estimated at 4,651,000 tons as against 3,970,000 tons in 1931-32, an increase of 17.2 per cent. In the matter of increase in yield in 1932-33 over 1931-32 Bengal heads the list with a percentage of 66.3 to her credit. The relative importance of the province in the total acreage and production of sugar has not been much affected during the period under review, though small changes are, no doubt, noticeable. But it is of interest to note that the United Provinces maintains a lead over the rest of India with 52.4 per cent. of the total acreage and 46.2 per cent. of the yield on raw sugar over the whole of India for the quinquennial period ending 1931-32.

The changes in the percentage of production have, presumably, been caused in the main by the adoption of the improved varieties of cane. The stimulus, which the protective duty and the expansion of the sugar industry have given to the cultivation of sugarcane in India is seen mainly in the rapidity with which the various sugar-growing provinces have taken to the improved varieties of cane which the researches of the Agricultural Department have placed at their disposal. The following table shows the area under improved varieties of cane in different provinces of India:

Province	1932-33 Acres	1931-32 Acres
United Provinces .	1,187,778	678,774
Punjab .. .	179,000	120,350
Bihar and Orissa .	236,100	189,418
Bengal	125,000	100,000
Madras	52,900	26,974
Bombay	6,400	Nominal
North-West Frontier Province ..	38,000	38,000
Assam ...	8,800	7,750
Central Provinces	8,441	7,013
Burma ..	3,369	2,200
Total ...	1,845,788	1,170,479

An analagous development on the industrial side is the greater increase in the number of factories that produced sugar direct from cane than in the number of factories which are refining *gur* or raw sugar. The following table gives the production of sugar from cane and *gur* together with the number of factories and refineries for 1926-27 to 1932-33:

Year	Production of sugar direct from cane (Tons)	Number of factories that produced sugar direct from cane	Production of sugar refined from *gur* (Tons)	Number of factories that refined *gur* or raw sugar
1926-27 ...	67,684	26	52,055	22
1927-28 ...	67,684	26	52,055	19
1928-29 ...	68,050	24	31,038	14
1929-30 ...	89,768	27	21,150	11
1930-31 ...	119,859	29	31,791	10
1931-32 ...	158,581	32	69,539	17
1932-33 ...	290,177	57	80,106	27

It must be added, however, that the production of sugar from *gur* showed marked increase in 1932 and has increased still more in 1933 due to the addition of factories refining *gur* in the off-season. The production of white sugar by Khandsaris and indigenous methods is estimated at 275,000 tons in 1932-33 as against 250,000 tons in the preceding season. It need hardly be mentioned here that the imports of sugar into India by foreign sources has decreased during this period from about 1,000,000 tons a year till 1930-31 to 560,000 tons in 1931-32 and 401,000 tons in 1932-33.

In view of the severe curtailment of imports and the heavy expansion of local production, it is of interest to examine the changes in the consumption of sugar in this country. It should be remembered that apparently the most weighty reason which the Finance Member offered, when he made the proposal for the levy of the excise duty on Indian sugar, was that the Indian industry had expanded more than was desirable, and that, to ensure efficient working inside the mills and a balance between production and consumption in the country at large, something should be done to make the industry take stock of the situation and act as the result of such stock-taking might indicate. The exact consumption of sugar in India is, in the nature of things, difficult to estimate. The method, which is at once practicable and sufficiently useful for our purpose, is to determine the quantity available for consumption during each year. Such quantity will be made up by the stocks at the beginning of the year, the production from various indigenous sources such as manufacture direct from cane refined from *gur*, and by the purely indigenous processes, the imports from abroad both by land and sea, *minus* the exports and re-exports of sugar and the closing stocks at the end of the year.

On the basis of this computation the consumption of sugar in India during the last few years may be put thus:

	Net quantity available for consumption Tons
923-24	678,081
1924-25 ...	859,057
1925-26 ...	1,011,488
1926-27 ...	999,302
1927-28 ...	1,101,524
1928-29 ...	1,164,805
1929-30 ...	1,324,923
1930-31 ..	125,585
1931-32 ...	982,540
1932-33 ...	895,280

In his review of the Sugar Industry in 1932-33, the Sugar Technologist has attempted to appraise the probable effects of the imposition of the excise duty on the sugar industry in India. When it is remembered that the Sugar Technologist is himself responsible for propagandising the view that the expansion of the Sugar Industry was assuming an alarming rate it is only to be expected that he should welcome the excise duty and forecast developments of a very desirable nature as a consequence thereof. Mr. Srivastava is of the opinion that promoters of new ventures are bound to act with great caution, that the factories already in existence are taking steps for increasing efficiency and reducing cost and that the future development of that section of the industry which manufactures sugar directly from cane can be expected to take place on lines which are entirely desirable. The *gur* refineries and the Khandsari section which, in his opinion, are the least efficient parts of the industry, might conceivably suffer from the more efficient competition of the sections first mentioned. It might be thought that the smaller units employing the Khandsari process have an advantage over their rivals in that they are exempt from the excise duty But it is apprehended that here, too, competition from the factories for the supplies of cane will be too strong for the Khandsari industry.

Particulars	Cane crushing season 1932-33 (Actual)	Cane crushing season 1933-34 (estimated)	Cane crushing season 1934-35 (estimated)	Cane crushing season 1935-36 (estimated)
	Tons	Tons	Tons	Tons
Production from existing capacity of old factories*	370,000	370,000	554,000	687,000
Production due to increase in capacity of old factories*		24,000	93,000	100,000
Production from new factories commencing manufacturing operations during the season		160,000	40,000	20,000
Total production of factory sugar ...	370,000	554,000	687,000	807,000
Estimated production of Khandsari sugar	275,000	225,000	200,000	200,000
Total production of all kinds of sugar excluding *gur*	645,000	779,000	887,000	1,007,000

*NOTE.—Under "Old Factories" are included all factories excepting those commencing manufacturing operations for the first time during the season.

The consumption of sugar in India in 1932-33 was 895,280 tons at which figure it left a margin of 417,116 tons to be taken advantage of by the importer. It is perhaps necessary to explain here that this margin for imported sugar is exclusive of re-exports and is arrived at after making allowance for the difference in the opening and closing stocks of imported sugar by ports, so that it will be seen that the gross imports will be somewhat higher. The consumption for 1933-34 is estimated at 880,000 tons and for the three succeeding years it is roughly estimated at 900,000 tons. Read together with the figures of production for these five years, it would be found that by 1935-36 India would be meeting nearly all her requirements of sugar from domestic production and that the next year would find the emergence of an actual export surplus of 107,000 tons. There is, indeed, nothing to feel alarmed at in this prospect of the increase of indigenous production. For, it should be remembered that the consumption of sugar in India during these years is nearly 25 per cent. short of the consumption during the six years ending 1930-31. It is by no means unreasonable to hope that, partly due to the natural revival of trade and economy, and in part also to the enrichment of the country by the operation of a new major industry, the purchasing power of the people will have so increased that, not only will current production be consumed, but there will also be a potentiality of further increase which the industry can well attempt to supply.

MARKETING OF INDIAN SUGAR

DISTRIBUTION OF PRODUCTION & CONSUMPTIVE DEMAND

By M. P. GANDHI

The development of the Sugar industry in India during the last two years and the interaction of available supply on demand and its effect on prices have raised a somewhat complicated problem of marketing. A careful examination of the statistics will reveal broadly the nature of the problems of distribution of sugar manufactured in India in the various territories and the deficiency or surplus of production over consumption in each province.

The present annual consumption of sugar in India may be taken at about 900,000 tons. The *per capita* consumption of sugar in India has been on an average about 5 lbs. per annum, leaving alone the *per capita* consumption of gur which comes to about 20 lbs. per annum. As long as economic conditions do not improve, this is not likely to increase very much except to the extent that the consumption of *gur* may be replaced by consumption of sugar in rural areas. Let us first see the figures of production of sugar during the years 1932-33, 1933-34 and 1934-35.

PRODUCTION OF SUGAR.

From Cane	No. of Mills approximate 1934-35	1932-33 (actual) Tons	1933-34 (Estimated) Tons	1934-35 (Estimated) Tons	1935-36 (Estimated) Tons
B. & O.	34	128,610	139,000	216,000	
U. P.	69	140,344	270,000	374,000	
Punjab	9	1,660	9,000	15,000	
Madras	11	9,625	12,000	25,000	
Bombay	7	7,318	13,000	23,000	
Burma	2	2,620	5,700	10,000	
Bengal	4	Nil	5,900	13,000	
Indian States	5	Nil	5,000	28,000	
Total Sugar in tons from cane	141	290,177	459,000	704,000	
Add—					
Sugar refined from gur (TONS)		80,000	95,000	60,000	
Khandsari Sugar ...		275,000	225,000	200,000	
GRAND TOTAL	141	645,000	779,000	964,000	1,100,000

It has not been possible to ascertain with any degree of exactitude the precise figure of consumption of sugar in India. The figures of the import of sugar during the last few years however furnish some information in regard to the same. The consumption of sugar in the year 1925-26 was 1,000,000 tons, in 1927-28, 1,100,000 tons, in 1928-29, 1,164,000 tons, in 1929-30, 1,300,000 tons and since then it has been showing a progressively falling tendency. The years of the maximum consumption, *viz.*, 1928-29 and 1929-30, are also the years when the prices of sugar were the lowest, the yearly average price of Java sugar in Calcutta during those being roughly, Rs. 9-13 and Rs. 9 per md. respectively. (*Vide* M. P. Gandhi, Indian Sugar Industry—Its Past, Present and Future). The consumption during the last four years may be taken at about 9 lakhs tons.

The following table gives an estimate of

consumption province by province for 1934-35:—

Bihar & Orissa & States	105,000	tons
United Provinces & States	125,000	,,
Punjab, States & Kashmir	80,000	,,
Madras, States & Hyderabad	165,000	,,
Bombay, States & W. P. States & MYSORE.	95,000	,,
Burma	35,000	,,
Bengal	130,000	,,
Assam, C. P., N. W. F. P., C. I. States, Raj. States, etc.	165,000	,,
Total for India	900,000	tons

This will show that we shall be producing during the next season a bigger quantity of sugar than the present estimated consumption.

The figures of consumption per province have been worked out roughly on the basis of population of various areas, due allowance being made for the known habits of the people in regard to consumption of sugar.

Roughly, it may be taken that one ton of sugar is consumed by 400 people per annum at the present time.

We may now be able to see the difference between production and consumption of sugar in the various provinces ; and the following table sets out the excess or shortage of production of sugar in the various provinces.

Province	Estimated requirement for consumption, 1934-35 Tons		Estimated Production 1934-35. Tons		Difference + (Excess production) − (short production) Tons
Bihar & Orissa & States	105,000		216,000		+111,000
United Provinces & ,,	125,000		374,000	574,000	+249,000 without Khandsari
		Khandsari	200,000		+449,000 with Khandsari
Punjab & States (Kashmir)	80,000		15,000		− 65,000
Madras, ,, (Hyder.)	165,000		25,000		−140,000
Bombay, ,, (W/S & Mys.)	95,000		23,000	43,000	− 72,000 without Mysore
		Mys.	20,000		− 52,000 with Mysore
Burma	35,000		10,000		− 25,000 ...
Bengal	130,000		13,000		−117,000 ...
Indian States (excluding Mys.)	...		8,000		

It will be useful to see the imports of sugar at the ports of Rangoon, Madras, Bombay, Karachi and Bengal for the last few years.

	1929-30	1930-31	1931-32	1932-33	1933-34	2 months April & May. 1934-35
Rangoon	42,690	40,288	28,335	26,391	19,640	2,635
Madras	90,899	83,611	79,054	53,782	53,884	9,289
Bombay	211,028	212,847	128,884	111,346	97,408	6,379
Karachi	218,690	230,569	109,391	85,618	59,822	6,775
Bengal	368,969	330,581	165,655	88,570	19,022	3,756
TOTAL (India)	932,276	897,896	511,319	365,707	249,776	28,834

From the above tables we shall be able to see that it will be necessary to send some quantity of sugar from the United Provinces and Bihar to the various ports in order to prevent as far as possible the import of foreign sugar. It has been estimated that it will be necessary to send about 15,000 tons of sugar to Rangoon, about 40,000 tons to Madras, about 75,000 tons to Bombay, and about 55,000 tons to Karachi. The total thus amounts to 185,000 tons. This represents roughly speaking about 30% of the production of sugar excluding *Khandsari* sugar, in the United Provinces and Bihar and Orissa.

A glance at the above tables will indicate that the production of sugar in the United Provinces will be the maximum, *viz.*, about 574,000 tons, there being an excess of about 450,000 tons which must be disposed of in markets in other provinces. Similarly there will be an excess in Bihar and Orissa of about 111,000 tons which has also to be marketed in other provinces. All the other provinces, *viz.*, Punjab, Madras, Bombay, Bengal, and Burma have huge deficits which they can make up at the present time by getting their requirements from the United Provinces and Bihar and Orissa. The biggest deficits are in the case of Madras and Bengal, *viz.*, 140,000 tons and 117,000 tons respectively. A well-planned system of marketing of sugar in order to distribute the excess production of one province in other provinces in a scientific manner is thus a great necessity for the progress and welfare of the industry in India.

INDUSTRIAL SECTION:

HIDES AND SKINS

The skins of cows and buffaloes are commercially known as "hides" and those of goats, sheep and other smaller animals as "skins." In India, the trade in hides and skins are mostly in the hands of Mahomedans and low-caste Hindus, as the other communities are not taking to it on account of their religious objections. The annual output of hides and skins, unlike agricultural crops, is subject to very little fluctuation. Consequently, with a wide market for consumption, it is the supply factor which regulates the trade more than the demand. Indian hides and skins have a large foreign market. About nine-tenths of the total quantity of hides and skins available every year are exported from the country. The exports are classified under four main categories, namely raw hides, tanned hides, raw skins and tanned skins. Indian hides, both raw and tanned, are largely used for the upper leather of boots; partially tanned skins are used for fancy leather goods and for covering the small rollers used in cotton mills for drawing the thread. Raw goat skins are almost entirely used in the manufacture of glace kid.

On account of the various uses of hides and skins and their increased consumption all over the world, the exports have throughout been steadily increasing. In 1860-61 exports amounted to Rs. 66.2 lakhs, while in 1913-14 they were Rs. 16 crores. The Great War brought about some changes in the export trade of India. The Government assumed complete control of the trade and the enemy markets were cut off. But there was a heavily increasing demand from the United Kingdom for military purposes. The huge exports stimulated by the war were only of an artificial nature; and in 1920-21 they fell to a very low figure of Rs. 8.4 crores. Since then, however, there has been a steady and continuous growth, the exports in 1928-29 amounting to Rs. 18.75 crores. This steady growth has been due chiefly to the increasing demand from the United States of America and the Continental countries of Europe.

RAW HIDES AND SKINS.

The exports of raw hides have undergone considerable changes. In the earlier days, the exports consisted mostly of raw hides; but now they represent only a small fraction. Till the outbreak of the War the bulk of our exports was consumed by the United Kingdom. At the present time, Germany and Italy are the most important markets.

Raw skins have come to occupy an important place in our exports since the development of chrome-tanning in India. India produces about one-third of the world's exportable surplus of goat skins. The chief market for raw skins is the United States of America. Next in importance come the United Kingdom and France.

TANNED HIDES AND SKINS.

On account of the prevalence of *Acacia* trees, whose bark is the principal material used in the tanning of hides of skins, Madras and Bombay are the chief exporting centres for tanned hides and skins. The export of tanned hides during the early years was not considerable. The outbreak of the War brought about an important change. There was a heavy demand from the United Kingdom for tanned hides for military purposes and the tanning industry in India received a good stimulus.

With the close of the War, Government purchases for military needs ceased; but it was decided that the industry should be helped. In 1919, a 15 per cent. *ad valorem* duty was imposed on exports of raw hides and skins. However, a rebate of 10 per cent. was allowed on shipments made to countries within the Empire. The idea of this rebate was to divert the export of raw hides and skins from Germany to the British Empire, at the same time giving encouragement to the Indian tanning industry. But neither of the two objects was achieved. The Indian tanning industry did not succeed as was expected. There was a fall in the export of hides from India and the greater part of the trade still passed

to Germany. There was a strong opposition from the exporters ; and the Fiscal Commission also condemned the duty as wrong in principle. The Government of India realised the defects of the duty and in 1923 it was reduced to 5 per cent., simultaneously with the removal of the rebate granted to exports to Empire countries.

The Taxation Enquiry Committee advised the complete abolition of the duty on raw hides ; and in the Indian Finance Bill of 1927 the Government proposed to abolish the duty of 5 per cent. *ad valorem* on raw hides. The proposal was thrown out by the Legislative Assembly by the casting vote of the President in favour of *status quo*. The Government of India, taking into consideration the well-balanced strength of the conflicting interests, seemed to prefer the replacement of the export duty by an export cess that would be administered by a committee on the lines of Indian Central Cotton Committee and that would be expended for the benefit of the industry as a whole. A Hide Cess Enquiry Committee was appointed for the purpose in 1929. The Committee, whose report was published in 1930, recommended a cess of 1 per cent. *ad valorem* on the export of raw hides and raw skins and also laid special emphasis on the appointment of a permanent Cess Committee. In the concluding paragraph of their report they observe:

"In point of importance this entire industry (the hide and skin trade and the Indian leather-making, leather working and allied industries) is one of the most important phases of India's economic life. Its annual gross value runs into many—as many as forty to fifty crores of rupees. It not only gives employment to large numbers of men, but—and this is an important fact to be kept in view—is a factor in the economic well-being of millions of India's depressed classes. Any action taken for its improvement will automatically, though perhaps gradually, help to better their lot. They are among the unorganised and silent submerged strata of the population of India, and have a legitimate claim on Government's active sympathy. The hide and skin trade and the tanning industry have in the past rendered inestimable service to the Government and the country, and it is only right that they should claim that organised efforts should be made to improve their condition. We hope we have succeeded in proving that there is a vast scope for work for the betterment of all branches of the industry and that any improvement effected in them will react favourably on the improvement of the economic conditions of the peasantry of India. Appalling waste is at present undoubtedly going on ; we have endeavoured to indicate the extent of the amount of loss, and the directions in which attempts can and should be made to reduce it. While we fully appreciate the valuable work done by the various interests concerned, we have found little evidence of an organised effort to visualise and attack the various problems as being organically connected with each other. We are convinced that action more or less on the lines set out in our Report will be in the best interests of India as a whole, including the Indian States. Every link in the chain—the cattle owner, the *chamar*, the owner of the slaughtered hide or skin, the trader, the commission agent, the tanner, the tanner for export, the shipper both of raw and of tanned stock will, and indeed must, benefit. We have, therefore, recommended the creation of a permanent Cess Committee and are confident that such a Committee with adequate funds at its disposal will be in a position to make a genuine beginning in one of the important directions of India's economic development."

In their budget proposals for 1934-35, the Government again recommended the abolition of the export duty on raw hides, in view of the depressed condition of the export trade in raw hides. The proposal was accepted by the Legislative Assembly and the duty was removed.

INDUSTRIAL SECTION

THE CEMENT INDUSTRY

The manufacture of cement in India was commenced as early as 1904 in Madras; but a real impetus was given to the industry only in 1912. With the boom that followed the end of the Great War, several new factories were established in too close proximity to one another. They had necessarily to operate in the same markets; and this led to the wasteful price-cutting war of 1923. The seriousness of the situation was soon realised and in 1924 all the companies made a joint representation to the Government for protection against foreign competition as a preliminary to the stabilisation of prices through an inter-company agreement. The Tariff Board on a careful enquiry decided that the industry suffered from over-production and that the low price of cement was due to the competition among indigenous manufacturers. The Government accepted the finding of the Tariff Board and no protection was granted. This rebuff had the most desirable effect. The Indian Cement Manufacturers' Association was formed in 1926; and prices were raised to an economic level in keeping with the small and necessarily expensive production of a tonnage sufficient to meet the demands of the market. The Association took active measures to increase the demand and in 1927 established a Bureau known as the Concrete Association of India. The function of this association was to popularise by educative and other means, the use of cement.

An even closer co-operation became the aim of the controlling interests and this led to the formation of the Cement Marketing Company of India, Ld., in 1930. The Cement Marketing Company practically controls the output of all the Indian factories on a quota basis. Even in its first year of inauguration, the company effected a saving of Rs. 4 lakhs in railway freights and reduced selling prices by Rs. 2-8 to Rs. 5 per ton. The company is also responsible for many other improvements. Coloured cements, which were formerly left for the consumers themselves to manipulate as best as they could, are now manufactured with the proper scientific progress. The product compares quite favourably with the best manufactures of the world. Another improvement is the evolution of that quality which takes far less time to harden. Works, which circumstances required to be carried out at great speed, have found these rapid-hardening cements of great value. In the despatch of cement, too, closely woven jute bags with waxed crepe paper lining have enabled the cement companies to send their products to countries like Bengal and Assam without fear of their being spoiled by the rains or the humidity of those parts of the country. Altogether the cement industry is one of the best instances of enlightened co-operation amongst the producers.

The importance of the cement industry may be gathered from the following data. The capital invested in this industry by the companies is about Rs. 5 crores of which Rs. 3½ crores is of the companies forming the Marketing Board. The industry employs between 20,000 to 25,000 workers and consumes about 320,000 tons of Indian coal per annum—an amount which is more than the consumption of the tea gardens or the Port Trusts. The Jute industry gains from cement to the extent that the latter is responsible for an annual demand of 12 million jute bags. Nearly Rs. ½ crore is paid to railways in the shape of freights by the Marketing Board alone. The output during 1931 was 587,806 tons as against 559,856 tons in 1930. The output in 1932 was somewhat less than that of 1931 being 582,182 tons, but this may be attributed to the general slump in the world trade. The imports of cement during 1932-33 showed a decline from 88,000 tons in the previous year to 83,000 tons. The bulk of the consignments (39,000 tons) came from Japan.

The cement industry need have no particular misgivings as to the future, if India is protected from foreign manufacturers dumping their excess stocks. It may be safely predicted that with the return of general prosperity, the Indian cement industry will not only go on expanding at the

old rate but with ever-increasing knowledge of its uses, will find new markets in every direction. India, so far from having reached saturation point in regard to cement, may be likened to a large sponge that has had only a few drops of water on it.

A short review of the working of the important cement companies will be of use as showing the present position and the future prospects of their industry. For, after all, the prospects of the industry depend as much upon the conduct of those who are in charge of it, as on the state of its production and the prospects of its demand. The Bundi Portland Cement Company, Ld., first started business under a different name and the present title was assumed in 1916. Its factory is situated at Lakheri about 600 miles north of Bombay on the B. B. & C. I. Railway lines. It has a capacity of 160,000 tons per annum and its equipment is up-to-date. Its principal product is the brand commonly known as the "BBB." The company has a paid-up capital of Rs. 40 lakhs with reserve and other funds amounting to Rs. 12.50 lakhs. The gross block account shows Rs. 82.19 lakhs and from 1927 to 1932 it declared an uniform dividend of 12½ per cent. In 1933 the dividend was increased to 15 per cent.

The Gwalior Cement Company have their works located at Banmore, 12 miles north of Gwalior. Its output is 45,000 tons per annum and it is so designed that the output can be doubled at an expenditure of Rs. 20 lakhs. The processes are appropriate to the limestone and argiellaceous clay which are the raw materials near at hand. The Company's capital is Rs. 26 lakhs and the block is valued in the books at Rs. 37 lakhs. The reserve and other funds amount to Rs. 3.5 lakhs. The dividend in 1933 was 5 5/8 per cent.

The Indian Cement Company works are situated in the well-known Porbander limestone quarries. The ordinary paid capital of the company is Rs. 38.96 lakhs. The block expenditure is Rs. 13.5 lakhs and the reserve and other funds amount to Rs. 7.87 lakhs.

The Shahabad Cement Company which like the Indian Cement Company is under the managing agency of Tata Sons, Ld., has a capital of Rs. 35 lakhs and the block is valued in the books at Rs. 61.78 lakhs. It has built up reserve and other funds amounting to Rs. 20.5 lakhs and the dividend has increased from 7 per cent. in 1927-28 to 10 per cent., 12 per cent. and 15 per cent. in the succeeding years. The shares at the end of 1933 were quoted at Rs. 306 for a paid-up value of Rs. 100.

The Punjab Portland Cement Company has an ordinary capital of Rs. 35 lakhs and also debentures to the value of Rs. 10 lakhs. The block value is put down at Rs. 69.15 lakhs and the company has reserve and other funds amounting to Rs. 7.05 lakhs. The dividend was maintained at 5 per cent. until 1932. The dividend for 1933 was 6 per cent.

INDUSTRIAL SECTION.

THE PAPER INDUSTRY

The manufacture of paper by hand existed in India from quite early times ; but it has very little relation to the modern paper industry. In Europe, paper used to be made out of rags. But now their use is confined to only certain special kinds, the bulk of the output being made out of Esparto grass, during the latter half of the last century and wood fibre at the end of the century. Conifer trees which are quite suitable for yielding raw material for the manufacture of paper have one serious disability, namely, that they took nearly 60 years to be replaced. Though Esparto grass is also suitable, there is still the problem of a shortage of cheap raw material ; and among the substitutes that have been thought of, bamboo is the most suitable. In Northern India, Sambai grass is used for making paper. No attempt has been made so far to manufacture paper from Indian wood though Indian paper is made of wood fibre. The essential operations of paper manufacture, according to the Tariff Board, are:

"(1) The removal by chemical means from the fibre of the elements which are not required, so as to isolate the cellulose. It is this process which converts the fibre into chemical pulp.

(2) The bleaching of the pulp with chloride of lime.

(3) The treatment of the pulp in the heaters. It is here that the experience of the trained paper-maker comes chiefly into play, and the quality of the paper made depends mainly on his skill and experience.

(4) The conversion of pulp into paper on the paper machine. Here the essential point is the interlacing of the fibres on the wire cloth and the ingenuity of the craftsman has had ample scope in devising the apparatus by which this is accomplished."

The normal consumption of paper in India comprising both local production and foreign imports is 99,000 tons ; but that part of it which the Indian industry can produce is very limited. The Indian industry cannot engage profitably either in the very low grade papers which are extremely cheap or the high-class glazed papers for which the demand is so limited as not to warrant any large outlay of capital. Deducting the imports on this account, the amount of imports which compete with Indian paper and which Indian industry can well produce by itself is 200,000 tons. The trade has been subject to a certain amount of dumping from countries like the United Kingdom and Germany which export only a small part of their production. Such a charge would not lie against Norway or Sweden ; but all the same the dumping that has been present has affected the Indian industry.

From the foregoing it will be seen that there are three important considerations for giving protection to the paper industry ; first, that the paper industry itself is subject to dumping from abroad ; second, that no less than 20,000 tons of the foreign imports can be produced at home economically ; and third, that in view of the possibility of the paper industry of the world coming to rely on Indian bamboo pulp, the manufacture of pulp from bamboo must be kept alive. And protective measure accorded to bamboo pulp would automatically increase the cost of the manufacture of paper and the manufacturer would, therefore, be entitled to a corresponding protection. It is in this manner that the country has been led on to afford protection to the two industries. The Tariff Board estimated for purposes of determining the protective duty on paper a fair selling price for Indian mills of Rs. 464 per ton. As the price which the Indian paper would realise on a free market is only Rs. 341, the measure of protection required would be Rs. 123 per ton. The import duty on pulp which the bamboo pulp manufacturing industry would require is Rs. 45 per ton. The consequent increase in the cost of manufacture is Rs. 45 per ton. The consequent increase in the cost of paper is Rs. 19 per ton. Thus, taking together the need of the paper industry of Rs. 123 per ton and the increase in the cost of production due to the protection of bamboo pulp of Rs. 19 per ton the total amount of pro-

tection for the industry would be Rs. 140 per ton or one anna per lb. The recommendations of the Board have been embodied in the Bamboo Paper Industry (Protection) Act, 1932 Newsprint, however, containing 70 per cent. of wood pulp is allowed to be imported free.

The most important producer of paper in India is the Titaghur Paper Mills Co., Ld., under the Managing Agency of Messrs. F. W. Heilgers & Co. The Company took over the machinery of the Bally mills which was first established in 1870 and which was liquidated in 1905. The Titaghur also took over the Imperial Paper Mills which was started in 1824 and was not able to continue. The estimated production of the Titaghur Company is about 20,000 tons per year. The next important concern is the Bengal Paper Mill Co., which took over the Gwalior Mill and removed its machinery to Ranigunge in 1922. The capacity of this Company is 8,400 tons per year. The other important mills are the Upper India Paper Mills at Lucknow with a capacity of 4,000 tons, the Deccan Paper Mill Company with an output of 1,700 tons and a few small concerns in Madras and the Punjab and the other provinces.

INDUSTRIAL SECTION:

IRON & STEEL INDUSTRY IN INDIA

The 1934 report of the Tariff Board has virtually struck the Iron and Steel Industry off the roll of protected industries both from the standpoint of the Government's willingness to protect and the industry's need for such help. For the Board have admitted that the duties they recommended are in the nature of anti-dumping, rather than protective, measures. It may, therefore, be said that the question of India's fitness to develop an iron and steel industry of her own is of somewhat historical interest. Nevertheless, in the kind of sketch we are attempting of each industry in this *Year Book,* it would not be inappropriate to go over the whole ground. It has been acknowledged for a long time that India has great natural advantages over other countries for the manufacture of iron and steel.

Obviously, the most important condition of the development of the iron and steel industry is the presence, in adequate volume, of deposits of rich iron ore and coking coal, situated sufficiently near to each other to reduce the cost of transport of essential raw materials. The researches of the Geological Survey have established that these natural advantages are very great indeed, especially in the matter of the quality, quantity and cheapness of the iron ore. "In other parts of the world equally cheap ore is to be found, but it cannot be landed at the iron works at anything like the same price. Conversely, equally cheap ore exists in some countries, but of nothing like the same quality. The advantage which India possesses in the shape of iron ore is, therefore, very great."

As regards coking coal, the superiority is, no doubt, less marked ; and yet even there, according to Sir E. Pascoe, the eminent Geologist, "there is enough coking coal in India to supply the iron and steel industry with four million tons of metallurgical coke per annum for the next 150 years at least."

Another great advantage consists in the nearness of the coalfields and the iron ore deposits: "On the Continent of Europe either the coal or the ore has often to be brought from a distance of 200 miles or more ; and in America the distances are much longer. The greatest centre of steel manufacture in the world is the western district of Pennsylvania, which brings its ore from the western shores of Lake Superior, more than a thousand miles distant, the journey involving a double transference from rail to water carriage and *vice versa* and its coal by rail from a distance of about 60 miles."

Thus, it will be seen, that Nature has more than done her part providing the resources for an Indian iron and steel industry. There is, of course, the question of labour of the requisite quality and quantity. Quality was a question of experience which can be gathered only in the course of the conduct of the industry. As for quantity, there can be no doubt that India's labour force is enough to sustain as large a productive activity as that of the foremost industrial nation to-day. The higher grades of skilled labour, technical and managerial, are also available, almost in surfeit.

There remains then the question of markets. India has been such a large importer of iron and steel that a ready market may be said to exist in the palm of our hand. And apart from the existing demand, market for the iron and steel industry is not to be judged merely by the amount of iron and steel we used to import, but also by the varied iron and steel goods, the indigenous manufacture of which would become possible when the basic industry is well-established within our borders.

The steel industry has, during the short period of its existence, afforded us a glimpse of such possibilities. For, round the Tata Iron & Steel Works at Jamshedpur have already gathered a number of other industries which are, so to say, a sample of the immense benefits which the steel industry can shower on the national economy.

There is at first the tinplate industry which has made such remarkable progress, that the result has evoked the admiration of the

Welsh experts themselves. It is also a key industry, assisting the oil industry in India, while, at the same time, it may in time also give an impetus to the fruit and fish canning industries.

The next industry comprised in the industrial district around Jamshedpur is the Wagon industry. The capacity of the wagon-manufacturing works at Jamshedpur, now in charge of the E. I. Railway, is about 1,500 broad guage wagons in a year, and there is no reason to doubt that a corresponding demand would be forthcoming as soon as the depression is past, and that the factory, which is now shut down, will resume work.

The third industry, which might be noticed in this connection, is the Tatanagar Foundry, which was started only in 1926, but has made rapid progress and has been able to supply more than one-third of the demands for cast iron sleepers and other materials for railways in India. This Company has taken a portion of the surplus pig iron and has also furnished the Steel Company with a number of castings for the use of their operation departments.

Further, there are Messrs. Jessop & Company's structural shops where railway wagons can also be erected and the fabrication of steel girders and plate girders, etc. done.

Then comes the Indian Steel Wire Products Company, which manufactures wires and wire nails ; and owing to the protection now granted there is a possibility of continuous operation.

The Light-foot Refrigeration Company have established a branch of their oxygen gas factory to meet the demands of the Steel Company for this product.

The location of so many industries in and around Jamshedpur in spite of the very unfavourable trade conditions during the last five years shows that this is bound to be an industrial district of the first importance when the depression has lifted, the industries in the group assisting and benefitting each other and enjoying the advantages of localisation and specialisation.

We have, doubtless, digressed on the question of industries which have come in the wake of the Iron and Steel industry. But for an understanding of the importance of the industry one must have an idea of the potentialities of growth in the demand as much as the natural advantages which the country can boast of.

It is in consideration of these that the successive Tariff Boards have recommended the measures of protection for the Iron and Steel industry. The history of the iron and steel industry is largely the history of protection awarded to it ; and the various stages of its development are best reflected in the changes effected in the scheme of protection recommended by the Tariff Board on each occasion. We may, therefore, sketch the history of protection to iron and steel.

The principle, which was laid down by the Board in 1923 and which has been followed since, was that "in the main the amount of protection should be the difference between two prices:

(1) The C. I. F. price at which foreign steel is likely to be landed into India without duty, and—

(2) The price at which the Indian manufacturers can sell at a reasonable profit, which was termed 'the fair selling price.' "

It is also important to bear in mind, as the Board rightly observed, that "the measures taken must be adequate to secure their purpose." The immediate needs of the industry must determine the amount of protection to be accorded at the outset, but the future of the industry must also be considered.

On the other hand, the Board's recommendation has been to conform to the formula of "discriminating protection," as laid down by the Fiscal Commission (the Majority Report) and as adopted by the Legislative Assembly in 1923. This formula virtually limits the amount of protection to be granted to what might be considered sufficient to enable the industry to tide over a difficult period, and no more. In fact, the Board in 1924 admitted (*vide* para. 100 of their Report of 1924) that "the general principle which underlies our recommendations, therefore, is that the assistance granted should suffice to give the Company,

(*a*) when they reach their full production, a fair return on their capital outlay after meeting all overhead charges, provided the Works expenditure is reduced to a reasonable figure, and

(*b*) the minimum of assistance required to tide the industry over a difficult period."

From the foregoing it is apparent that tariff-making under these conditions resolves itself to the very difficult task of forecasting, with some degree of exactitude, a series of variable unknowns. In other words, tariff-making, in accordance with the formula of "discriminating protection" on the lines of Fiscal Commission's Majority Report, conceived as it is on a basis of a very moderate scale of protection, becomes very largely a matter of intelligent guess-work.

This will become clear from a consideration of the extremely chaotic state of the steel market during the decade of protection, which was due to expire in the Spring of 1934. The Tariff Board, for instance, arrived at the conclusion (in 1923, during its first enquiry) that a fair selling price of Rs. 180 per ton average would enable the domestic steel industry to sell its products at a reasonable price in competition with imported steel. Accordingly, a scale of duties, averaging Rs. 32 per ton to be levied on imported steel, was recommended. And it was accepted both by the Government and the Legislature and incorporated into the Steel Industry (Protection) Act of 1924. But these forecasts of the Board became wholly inoperative in the meantime on account of a large fall in the price of imported steel, owing to continued depression in the European steel trade, further aggravated by the depreciation of the Continental exchanges and the appreciation of the rupee to over 1s. 4d.

A fresh enquiry was, therefore, ordered by the Government in October, 1924, which resulted in the Tariff Board's recommendation to augment the duties to an average of Rs. 63 per ton. With the concurrence of the Legislature, the Government, however, sanctioned, in place of the offsetting duties proposed by the Board, a bounty of Rs. 20 per ton on 70 per cent. of the weight of the steel ingots produced, subject to a maximum of Rs. 50 lakhs for one year from the 1st October, 1924, to the 30th September, 1925.

But as the price of imported steel continued to fall, the Board was again directed to make another enquiry and consider "whether in view of the conditions of the industry and of the probable level of prices of steel articles, the protection afforded by the Steel Industry (Protection) Act to the manufacture of the articles enumerated therein should be supplemented beyond the 30th September, 1925." The Board, in its report dated the 2nd September, 1925, again recommended that "further assistance should be given for the period ending the 31st September, 1927, and that in the case of the rolled steel industry it should be given in the form of a bounty at the rate of Rs. 18 per ton on 70 per cent. of the ingot production, subject to a maximum of Rs. 90 lakhs." However, the Government, with the concurrence of the Legislature, reduced it to Rs. 12 per ton and limited the amount payable to Rs. 60 lakhs. This was on the 15th September, 1925.

In 1926, a fresh statutory enquiry was instituted. The Board took into account the large reductions in the Tata's manufacturing costs and the enquiry resulted in the imposition of a greatly reduced scale of duties. In the table below will be found their estimate of the "duty paid" prices at which foreign steel was considered likely to enter India during the period 1927-1933. A comparison with their estimate in 1923-24 is instructive:—

Rails	154	118	...
Structural Sections ...	175	123	116
Bars	180	134	125
Plates	180	135	128
Black Sheets ...	230	188	181
Galvanised Sheets ...	345	278	...

In recommending these duties, the Tariff Board observed that "the prices of rails should thus be at least Rs. 35 per ton lower than the price three years ago, while the corresponding fall in the prices of the other products will average about Rs. 50 per ton."

The working of the 1926 scheme of protection is best dealt with as part of the 1934 Enquiry. This enquiry was enjoined by Statute. At its inception the Tata Iron & Steel Company gave a review of the 1926 scheme as the basis on which it claimed for protection in the years to come. It would be unnecessary to go into the details of the Company's claims and conditions and the Board's final findings. Suffice it to say that the 1926 scheme did not work all according to expectations. For prices were at a dead low level. The demand for steel shrank to inconceivably low proportions. And costs, as a result, were more than they should be if output could be maintained near to capacity. The Company was also subject to a disastrous strike. But from the standpoint of the development of the industry all that matters is the progressive realisation of economies, which it is the primary purpose of any scheme of protection to achieve. From this standpoint the 1926 scheme of protection is undoubtedly a success, though far more credit is due to the Company than to the scheme.

The Tariff Board points out that an important aspect of the question of the success or otherwise of the 1926 scheme is the proportion of the Indian market which is now supplied by the Indian industry. The share of the available Indian market obtained by the Tata Company rose from 30 per cent. in 1927-28 to 72 per cent. in 1932-33. The whole of the fall in the demand has been borne by imported steel. The Tata Works have steadily maintained an output roughly equal to 75 per cent. of their capacity, while outside India, France worked 57 per cent. of capacity in 1932, Germany 35 per cent., United States of America 24 per cent. and United Kingdom 54 per cent.

But the real test is, as we have mentioned already, the reduction in costs. It is best judged by a comparison of costs in 1933 with the costs in 1926 and the expectations which the Board had in that year. The following table gives the requisite data:

Works Costs.

	Costs in August, 1926	Board's estimate in 1926 of costs 1933-34 with coal at Rs. 8 and spelter at Rs. 555.	Board's estimate with coal & spelter at Rs. 5·21 and Rs. 235.	Adjusted cost January-June, 1933.
	1	2	3	4
	Rs.	Rs.	Rs,	Rs.
Rails ...	79.60	61.60	52.80	56.00
Fishplates ...	116.40	90.00	81.20	86.52
Structural sections	105.30	69.10	60.30	60.00
Bars ...	99.00	77.00	68.20	59.63
Plates ...	103.30	80.30	71.50	62.57
Tinbar and billets	71.40	55.40	46.60	44.86
Black sheets ...	164.00	122.00	113.20	85.54
Galvanized sheets	263.70	200.00	163.80	115.54
Sleepers ...	...	72.00	63.20	55.86

It is necessary to explain that the figures are the works costs for each ton of steel, that is, without overheads and profits. The 1926 Board made its estimate of costs for 1933-34 on the basis that the prices of spelter and coal would rule at Rs. 555 and Rs. 8. Owing to the fall in such prices to Rs. 235 and Rs. 5.21 respectively recalculation is necessary to provide a comparable basis for these figures. It will be seen that in most cases the Company has even exceeded the anticipations of the 1926 Board.

There is still scope for further economies and the following table gives the figures of costs as at present foreseen for the next period of protection:

Works costs per ton.

	Adjusted present costs.	Estimated 1940-41	Average for period	Average costs including increased railway charges.
	Rs.	Rs.	Rs.	Rs.
Rails ...	56.00	44.23	50.11	53.11
Fishplates ...	86.52	69.00	77.76	81.26
Structural sections	60.00	48.23	54.11	57.11
Bars ...	59.63	49.00	54.31	57.31
Plates ...	62.57	50.58	56.57	60.07
Tinbar and billets	44.86	35.56	40.21	42.71
Black sheets ...	85.54	65.12	75.33	78.83
Galvanized sheets	115.54	95.12	105.33	108.83
Sleepers ...	55.86	46.06	50.96	53.96

It will be easily appreciated that the difference on this basis between the selling price of Tata products and imported articles has been bridged and in some cases even obliterated. The recommendations of the Tariff Board were therefore as in the following table:

	Duties recommended by the Board in 1926	Existing specific duties	Present estimated duties
	Rs. per ton.	Rs. per ton.	Rs. per ton
Rails ...	13	16¼	Nil.
Fishplates ...	6	7½	Nil.
Structurals—			
(1) United Kingdom (tested) ...	19	23¾	Nil.
(2) Continental (untested) ...	30	37½	43
Bars—			
(1) United Kingdom (tested) ...	26	32½	10
(2) Continental (untested) ...	37	46¼	39
Plates—			
(1) United Kingdom (tested) ...	20	25	Nil.
(2) Continental (untested) ...	36	45	25
	Duties recommended by the Board in 1926	**Existing specific duties.**	**Present estimated duties.**
	Rs. per ton.	Rs. per ton.	Rs. per ton.
Black sheets—			
(1) United Kingdom (tested) ...	35	43¾	11
(2) Continental (untested) ...	59	73¾	32
Galvanized sheets—			
(1) United Kingdom ...	38	53	10
(2) Continental	38	83	10
Sleepers ...	10	12½	Nil.

The articles for which the Tariff Board did not recommend any protection can be easily seen. But the Board actually recommended the removal of even the revenue duties on tested structurals and plates from the U. K.—a recommendation which has been adopted in the Steel Protection Bill of 1934 which has imposed an excise duty of Rs. 4 per ton of steel ingots and only countervailing duties on the imports. The Tata's request for the incidental protection of a 10 per cent. revenue duty was turned

down and all that the Select Committee of the Assembly was able to secure was to make the 10 per cent. duty alternative to 1½ times the excise duty on steel ingots. Drastic as are these measures, it is a great comfort that the Tata Iron & Steel Company does not feel crushed by this ultra-free trade in India. But there can be no doubt that the Government have put an end to the expansion of this key industry.

STEEL CASTING INDUSTRY.

A Calcutta Concern: By K. Sircar.

The urgent need of a properly equipped modern Steel Foundry capable of turning out sound Steel Casting of all kinds at a reasonable price must have been realised by all Engineers in India for sometime past. Barring the Tata Iron & Steel Co., there is hardly any other Steel Works existing in India for the purpose of supplying steel castings to the trade, and in consequence all steel castings for Railwys, Public Works, Jute Mills, Sugar Mills, Oil Expellers, General Engineering Works, etc., etc., have to be imported from Europe. The disadvantages of this are obvious. Apart from the question of cost, the inconvenience and loss of output due to a failure of a steel casting in an Engineering Works is often most serious. If spares for replacement are not carried, a broken or fractured casting may not be replaced for many months, during which time the loss through machinery remaining idle may be very heavy. This fact must have been brought home to most Engineers at some time or other during the last Great War when supplies of steel castings from Europe were practically cut off. The great railway workshops must have experienced the greatest difficulty in meeting the demands for castings for their rolling stock. In addition to the demand for miscellaneous castings the need for a source of supply of special steel for a great variety of purposes is very great. Ingots of Tool Steel, Die Blocks of all sies for Drop Forging work, Anvils, Pistons, Valves, etc., are but a few of the Special Steel in constant demand where large Railway and Engineering Works exist.

It was with a view to meeting the demand for Steel Castings and Special Steels of the kind briefly described above that the Pioneer Electric Steel Company was formed in 1920. It was at that time, a private company was promoted by the well-known firm of Calcutta Merchants, Sir Sarupchand Hukumchand & Co. The Company became a limited one in 1928, Sir Sarupchand Kukumchand & Co., being appointed Managing Agents. The name was then changed to the Hukumchand Electric Steel Co., Ltd. The reason for the formation of the Company was therefore to provide a local source of supply of all kinds of Steel Castings such as are in continual demand by Railways, Wagon Builders, Engineering firms, etc. The variety of castings which the Company set out to produce may be classed briefly as follows:—

(*a*) *Railways*.—Locomotive parts such as Axle Boxes, Motion Plates, Wheel Centres, Bogie Frame Stays, Bogie Centre Pivots, Buffers, Drag Boxes, Horn Checks, Rubbing Blocks, etc., etc.

(*b*) Carriage and wagon parts such as Axle Boxes, Buffers, Head Striking Castings, Draft Yokes, Bogie Pivots.

(*c*) *Wagon Builders*.—Similar to (*b*) above.

(*d*) *General Engineering Works*.—Bridge Bearings, Spur Wheels, Gear Wheels, Pinions, Hydraulic Cylinders, spare parts for Sugar and Oil Mills, Cast Steel pipes, Bends, Elbows, Tees, Manwhole Covers, etc., for Boilers.

Hitherto perhaps the greatest difficulty in the way of establishing a Steel Foundry in India is that of obtaining an adequate supply of suitable Pig iron for conversion into Steel. This difficulty has been completely obviated by the advent of the Electric Steel Melting Furnace. The essentials for success for this type of furnace are cheap raw material and cheap electric power. These are fortunately available in ample quantity in Calcutta. Probably no metallurgical process has made such giant strides towards perfection during the past few years as the electric furnace for steel-melting.

The Company's Works are situated along side Ballygunge Station on the Eastern Bengal Railway. The Works Siding takes off from the Ballygunge Goods Siding. The present buildings cover approximately 1,00,000 sq. ft. and ample land has been leased for future extensions.

The main Foundry building consists of two main bays of steel construction, each 600 ft. long by 40 ft. wide with verandahs 20 ft. wide. Each bay is served by three 5 tons capacity Electric Travelling Cranes. There is in addition a 50 ft. bay—400 ft. long, running parallel with the main bay. This 50 ft. bay is also served by a 5-ton Electric Crane.

The Steel Melting equipment consists of two 40-50 cwt. Electric Steel Melting Furnaces. Each furnace is capable of producing 12 to 15 tons of liquid steel every 24 hours. Electric power is supplied by the Calcutta Electric Supply Corporation at 6,000 Volts A.C., 3 phase, 50 periods. This H. T. current is transformed by means of Metropolitan-Vickers Transformers down to 110/90/60 volts for furnace working. The furnaces are of the tilting type, the tilting gear being operated by a 10-H.P. Motor. The furnace bottom is lined, first with a layer of Fire Bricks, then Magnesite Bricks and on top the hearth is formed of burnt Dolomite rammed and fused in by means of the Electric Arc.

The furnace charge consists of Steel Scrap in the form of Turning sand Borings, Heavy Scrap in the form of Feeder Heads, Risers, etc., such as Crop Ends from Angles, Tees, Bolts and Nuts, etc.

Melting and refining occupies 3½ to 4 hours per heat and when ready the metal is poured from the furnace into the ladle by means of the tilting arrangement.

The advantages of producing Liquid Steel for Castings by means of the Electric Steel Furnace may be briefly stated:—

(1) The temperature of the furnace is under the complete control of the operator and can be regulated within very narrow limits. It is, therefore, possible to adjust the temperature of the liquid steel to suit the particular class of castings being made in the Foundry.

(2) The metallic charge does not come in contact with the products of combustion of solid or gaseous fuel which carry objectionable impurities.

(3) The conditions in the furnace can be regulated at will and be made either oxidising or reducing. There is, therefore, little fear of the metal being over-oxidised, a condition which produces "blow holes" and "sponginess" in Steel Castings.

(4) The furnace being "basic" lined, phosphorus can be almost entirely eliminated and by means of suitable additions of Flour Spur with the reducing atmosphere mentioned above, Sulphur also can be reduced to minimum.

Generally speaking, castings made from Electrical Melted Steel are sounder, freer from blow holes, contraction cavities, etc., than those made by other processes.

Steel castings of any desired specification can be worked to and steel of the most suitable composition for any particular purpose produced. Thus castings subject to heavy wear and tear can be supplied in high carbon steel or Manganese Steel, as required.

Metallurgical Laboratory.—No Steel Works could be considered complete now-a-days without a well-equipped Laboratory for the analysis of testing of raw materials and finished products. The Hukumchand Works has a Laboratory complete with all the necessary apparatus and equipment for the chemical and physical testing of all materials used in the manufacture of Steel and Iron Castings. This department is in charge of a qualified Indian Chemist.

Staff.—The greatest care has been taken in the selection of technical staff of the Works. The heads of departments are Europeans trained in England at Steel Foundries of repute and who are assisted in their works by educated Indians. Each is a specialist in his own particular branch of Steel Founding. Each department is therefore very efficiently supervised and the methods adopted are as up-to-date as possible.

INDUSTRIAL SECTION:

THE COTTON TEXTILE INDUSTRY

The place of the cotton textile industry in the national economy of India is second only to that of agriculture. Alike in capital sunk, in the volume of employment which it creates and in the net addition to the total wealth and annual income of the country, it has hardly a rival among our industries. And what is as important, if not more, it has had, for various reasons, a peculiar hold on the affection and allegiance of the public. Its decline in the latter half of the seventeenth and eighteenth centuries was regarded as the symbol, as much as the result, of the country's political subjection; and from that time to this its progress has been in the public mind equivalent to the progress of our political and economic emancipation.

This is only understandable, for India was the birthplace of the cotton industry. The best of our cotton manufactures are still unsurpassed in the fineness of their texture and their superb finish. Historians of various ages and climes are agreed that India enjoyed a glorious export trade in cotton fabrics. Its decline, which could have been brought about by the mechanical improvements of the West, actually followed a deliberate policy on the part of the British Government both here and in Great Britain to crush the Indian industry in the interests of Lancashire. It is unnecessary to dwell on this policy as it was the sole substance of the political agitation during the earlier part of the last half century. But the unnatural end of the historic cotton industry of India did not, as indeed, it could not, affect our natural advantages for the development of a cotton mill industry on modern lines. In fact, the first cotton mill was started in Calcutta with English capital by persons who saw that the saving in freights to and fro would be sufficient to outweigh the other disadvantages that might arise from unskilled labour and the import of machinery from abroad. But nature had designed Bombay as the home of the Indian Cotton Mill Industry. The beginning was made by two Englishmen; and the first Indian mill was established in 1856 under the management of a Parsi gentleman. More followed in rapid succession; and the progress up to the year 1880, may be gauged from the following table: —

Year	No. of mills	Spindles (In thousands)	Looms (In thousands)	Labour
1851	1	29	...	.5
1866	13	309	3.4	7.7
1876	47	1,100	9.1	...
1877	51	1,244	10.3	...
1880	56	1,461	13.5	44.4

From the year 1879-80 more complete statistics are available; and the table below shows the development of the industry for the quinquennial periods up to 1903-04 and for the two years thereafter.

Years.	No. of Mills at work	Nominal capital (in lakhs Rs.)	Persons employed in	Looms Thousands	Spindles
1879-80 to 1883-84 ...	63	6,57.6	51.0	14.5	1,610.6
1884-85 to 1888-89 ...	93	8,87.9	75.7	18.2	2,296.8
1889-90 to 1893-94 ...	127	11,61.1	1,16.1	25.3	8,263.8
1894-95 to 1898-99 ...	156	14,19.5	1,50.	36.6	4,046.1
1899-00 to 1903-04 ...	195	16,87.9	1,71.6	42.	5,000.9
1904-05 ...	203	17,57.5	1,96.4	47.3	5,195.4
1905-06 ...	204	17,19.7	2,12.7	52.3	5,293.8

At the beginning of the War the Indian mills were 241 in number with a spindlage of 6.3 million and a loomage of over 92,000. The total production of the industry, according to the estimates of the Tariff Board presided over by Sir Frank Noyce was 688 million lbs. of yarn and 1,164 million yards of cloth, exclusive of handspinning and handweaving; as against 353 million lbs. and 422 million yards in the beginning of the century.

Thus at the date at which it is usual to take a halt in any historical review of industries the cotton mill industry had shown a remarkable expansion. There was also a

marked alteration in its character. It passed from an essentially spinning industry, exporting more than half its production, to a weaving industry using imported yarn in its products. And this, in spite of the fact that the number of spindles had increased by 39 per cent. and the number of looms by 142 per cent.; the essence of the change referred to 115,818 ; the number of spindles per loom falling from 119 in 1898-99 to 68 in 1912-13.

The five War years witnessed the continued operation of the tendencies apparent in the earlier period. By August, 1918, the number of mills increased to 249, the number of spindles to 6.56 million and the looms to 115,818 ; the number of spindles per loom also fell to 56. Further expansion was retarded by the difficulty of obtaining machinery from Britain ; but production was all the same increased. Other important features during this period were the loss of the export trade in yarn—which was due partly to the competition of Japan in the East and partly to the increase in the domestic demand and the increasing share of Japan in the home trade.

The three years immediately following the end of the War were a period of abounding prosperity for the cotton mill industry in India. The prosperity of the mills, together with the fact that owing to the high rate of sterling exchange for the rupees, foreign machinery was cheap, orders for new machinery both for old and new mills were freely placed. But when the deliveries were made, the rupee had fallen and importers met with severe losses. Conditions in the domestic market had undergone a marked change. A crisis of first magnitude developed in the imported piecegoods. Dealers looked at their burnt fingers and shunned all stocks, foreign and indigenous. The neglect of foreign markets for Indian yarn, of which mention has already been made, began to aggravate the troubles in the spinning section. And by 1926, it would be true to say that the cotton mill industry, at any rate in Bombay, showed all the characteristic features of a trade depression following an intensive boom period. And not the least of those features was the painful, almost calamitous, disillusionment of many who had partaken in the numerous conversions of the proprietary mills into joint stock concerns. With the depression came the question of reduction of wages which had been increased not exactly during the time of the boom, but in its closing stages. For the worst of wages is that they do not move in accord with the prosperity or the slump in the industry. The rise in wages was resisted by the mills ; and later the fall was opposed by the labourers. The result was, more especially in Bombay, a series of strikes, from which no good flowed except a reduction in the swollen stocks.

These conditions led to the Tariff Board enquiry of 1926, and its terms of reference were:

(1) To investigate the condition of the cotton textile industry in India, with special reference to the industry in Bombay and Ahmedabad ;

(2) To examine the causes of the depression in the industry and to report whether they are of a temporary or permanent character ;

(3) In particular, to consider whether, and if so to what extent, the depression is due to the competition of other countries in the home and export trade ;

(4) To report whether, having regard (*i*) to the fact that the industry has long been firmly established in India, and (*ii*) to the interests of the consumer and to all other interests affected,—

- (*a*) the industry is in need of protection ; and
- (*b*) if so, in what form and for what period protection should be given; and

(5) to make any other recommendations that are germane to the subject.

The Tariff Board confirmed the impression conveyed by its terms of reference that the plea for protection was made with far greater importunity by Bombay and Ahmedabad than the mills outside. And even as between these two cities the former was in a worse position than the latter. In fact, Bombay has certain permanent disadvantages as compared with other centres, *e.g.*, the higher wages of a highly urbanised area the higher costs of fuel and power, remoteness from the sources of raw cotton and the chief markets for finished goods ; and these can be offset by advantages in regard to cost of stores, of insurance and of office expenses only if the management makes the best of the latter and reduces the former to its irreducible minimum.

The other questions were necessarily of a more complicated kind, as the conditions of the mill industry had to be examined in relation to the piecegoods market which was itself subject to violent external forces. There was no doubt that the loss of the Chinese market was an important cause of the depression. There was no doubt, too, that there was some degree of unfair competition from Japan which was having longer hours of work and employing women labour

to more than the legitimate extent. And so far as Bombay was concerned, it suffered as much from the competition of other Indian mills as from the factors mentioned above. The remedy which the Tariff Board suggested was the variation of products ; and to this end they recommended a bounty for the spinning of higher counts.

It would be appropriate at this stage to give a short history of the tariffs on cotton goods in India, without going into the controversy that has always waged round it in apparent disregard of incontrovertible facts. The Indian Tariff Act of 1894 imposed a duty of 5 per cent. on all imported cotton yarns and fabrics ; and at the same time an excise duty of 5 per cent. was levied on the production of yarn above 20s. Later in 1896 Government, under pressure from Lancashire interests and on the pretext of free trade, removed the duty on cotton yarn and reduced the duty on cotton fabrics, imported and produced locally, to 3½ per cent. The injustice to the local industry continued till the financial necessities of the War time and the pressure of a growing public opinion forced Government to raise the import duty on cotton fabrics to 7½ per cent. In 1921, a similar need brought about a further enhancement of the duty to 11 per cent., the excise duty remaining unaltered all the time at the level of 3½ per cent. In 1922, imported cotton yarn was subject to a revenue duty of 5 per cent. And in 1926, the excise duty was finally abolished.

But the advantage derivable from the increased duty was neutralised largely by the eighteen pence ratio which was unquestionably a substantial aid to importers into India. The industry felt the disability very keenly ; and to this were added the disastrous effects of strikes, with the result that the cotton mill industry, especially of Bombay, had an unbroken tale of woe. Mr. G. S. Hardy, the Collector of Customs at Calcutta was deputed to enquire into the possibility of replacing the *ad valorem* duties on cotton piecegoods with specific duties, and to examine the condition of the trade since the report of the Tariff Board in 1926. Mr. Hardy's report was to the effect that the administrative difficulties involved in a system of specific duties were a conclusive argument against it and that, so far as the trade was concerned, Japanese imports were gaining ground, first at the expense of Lancashire and latterly to the detriment of the Indian mills.

The Budget for 1930-31, therefore, provided for an increase of the import duty on cotton piecegoods from 11 per cent. to 15 per cent. and the Government proposed to levy an additional 5 per cent. on all non-British cotton goods for three years. An amendment in the Assembly deprived Lancashire of the preference in respect of grey goods which constitute the bulk of the production of Indian mills. The Supplementary Budget of September, 1931, imposed surcharge of 25 per cent. on cotton piecegoods in common with all other imports.

At the time the last mentioned changes were made, the Government of India made it clear that the protection was given purely as a temporary measure dictated by the necessities of the moment and not as the final decision of a considered policy. "The object in view," in the words of the Commerce Member, "is not the development of the industry but its preservation," the provision of a shelter behind which the industry could make genuine efforts for a reorganisation. It was also made clear that Government did not expect the mills to venture on new ground such as the production of finer yarn or the weaving of higher quality goods and that the whole question would be gone into again at the expiry of a period of three years dating from March, 1930. But it is necessary to remember, and it is a matter for gratification, that the grudging and halting manner in which the Government were prepared to succour the industry was more than made up by the intense passion for *Swadeshi* which has seized the people during the years in which the Civil Disobedience movement was at its strongest. The Congress had during this period, especially in the earlier part of it, thrown its full weight in favour of the indigenous manufactures ; and in spite of the official displeasure and the opposition of foreign interests the Congress Executives all over the country succeeded in binding the mills to a policy of strict *Swadeshi* in their production. Thus with mills bound over to the use of Indian made yarn, and foreign cloth shops and dealers subjected to unintermittent picketting, and the masses themselves taking spontaneously to an unqualified patronage of Indian piecegoods, the cotton mill industry in India came to furnish the sole instance in the whole world of an industry which made headway during the unprecedented depression.

Statistical data in regard to the cotton mill industry and the cotton piecegoods market in which the indigenous industry is only one of the principal competitors are given in part at the end of this article and in part in the trade tables. Taken together they show that the principal features of this

trade are that the Indian mills have made tremendous headway ; that the British cotton mill industry lost its hold on the Indian market and that the Japanese are the most formidable competitors to the indigenous mills in a number of lines. The threat of Japanese competition became more serious with every fall in the value of the yen as against the rupee. During the period in which Japan remained on the gold standard after India's abandonment of it, the Japanese industry suffered to that extent a very considerable handicap. Afterwards the handicap was scratched when the yen went off gold. In the middle of 1932 Japan showed clear signs of a desire to stabilise the yen at a very low value in terms of the pound. This increases the dangers to which the indigenous industry and particularly Bombay, which is the least efficient part of it, are exposed. The Bombay mill industry grounded its appeal for an examination of its claims by the Tariff Board on a number of factors ; but the devaluation of the yen lent forcible point to Bombay's demand.

Japanese dumping was so persistent and embraced so many commodities that the Associated Chambers of Commerce and Industry in their annual session in 1933 appealed to the Government of India to take powers to levy emergency duties with a view to protect indigenous industries exposed to such unfair competition. The necessary legislation was passed through the Assembly in the 1933 budget session.

With regard to cotton, the resolution of the Government of India dated 25th July, 1932, referred to the question of increased duties on cotton piecegoods not of British manufacture to the Tariff Board for an "immediate enquiry." The terms of reference were:—

"To report whether cotton piecegoods not of British manufacture are being imported into British India at such a price as is likely to render ineffective the protection intended to be afforded by the duty imposed on such articles under Part VII of the Second Schedule of the Indian Tariff Act, 1894, by the Cotton Textile Industry (Protection) Act, 1930, to similar articles manufactured in India ; and, if so, to consider—

(*a*) to what extent, if any, the duty on cotton piecegoods not of British manufacture should be increased and whether in respect of all cotton piecegoods not of British manufacture or in respect of cotton piecegoods, plain, grey only, or of cotton piecegoods, others, only ;

(*b*) whether the duty should be increased generally, or in respect of such articles when imported from or manufactured in any country or countries specified ; and

(*c*) for what period any additional protection found to be required should be given,

and to make recommendations."

On September 2nd, the report of the Tariff Board was published and on August 30, came the full text of the resolution of the Government of India and the report of the Tariff Board. The decision then made was that the *ad valorem* duty on cotton piecegoods, not of British manufacture, which was fixed by the Cotton Textile Industry (Protection) Act, 1930, at 20 per cent. and to which surcharges amounting to $11\frac{1}{4}$ per cent. have been added for revenue purposes by the Finance Act of 1931, should now be raised to 50 per cent., subject to a minimum specified duty of $5\frac{1}{4}$ annas per lb. on plain grey piecegoods ; and that the increased duties will take effect immediately and will remain in force till March 31, 1933, and will not be subject to the sur-charges imposed by the Indian Finance Act of 1931 and the Indian Finance (Supplementary and Extending) Act of 1931."

The consideration which impelled the Tariff Board to recommend the increased duties was mainly the depreciation that had taken place in the exchange value of the yen. They had, however, to examine the question whether the advantage of a depreciated currency was not offset by Japan having to pay an increased price for import of raw materials from abroad.

The following extract gives the plan and the method by which the Tariff Board arrived at the view that the duty required in the situation caused by the depreciated yen was 53 per cent.:

"In our calculation we assume the net import price (ex. duty) of piecegoods in March, 1930, to have been 100. We take into account the protective duty on non-British goods at 20 per cent. and we leave out of our reckoning the surcharges introduced for purely revenue purposes. We put the fall in the price of raw cotton since March, 1930, at Rs. 250 and the current average rate for July-August delivery at Rs. 170. The proportion which the cost of raw cotton bears to the selling price of finished piece-goods has been taken approximately at 40 per cent. in the classes of goods similar to those made in Indian

mills. We find the fall in the rupee-yen exchange since March, 1930, rate 136.6 and the current rate at 106.

	Net price ex. duty	Duty	Fair selling price
Price of piecegoods in March, 1930	100	20	120
Corresponding price at current price of cotton: 100 minus 40×32/100 ...	87	17	104
Net price at current yen exchange: 87 minus 22 per cent.	68	...	...
Duty required for fair selling price: 104 minus 68	...	36	...
Equivalent *ad valorem* rate of duty: 36/68×100 ...	...	53 per cent.	

It is significant that at the time the Government of India announced their decision to grant the additional protection, the figures employed by the Tariff Board in its calculations had become obsolete by a further depreciation of the yen.

And further action was rendered necessary by the inadequacy of the protection awarded against dumping. And in the middle of 1933 the Commerce Department issued the following notification:

"In exercise of the powers conferred by sub-section (5) of section 3 of the Indian Tariff Act, 1894 (VIII of 1894) and in supersession of the notification of the Government of India in the Department of Commerce No. 341-T (164) dated the 30th August, 1932, as amended by Notification No. 341-T (5) 33 dated the 31st March, 1933, the Governor-General-in-Council is pleased to increase the duty chargeable under Part VII of the Second Schedule to the said Act on the articles specified in the annexed table to the extent set forth therein.

Article with number of entry in Part VII of the second schedule under which duty is chargeable.

Cotton piecegoods (other than fents of not more than nine yards in length) —(A) Plain grey that is not bleached or dyed in the piece, if imported in pieces, which either are without woven headings or contain any length of more than nine yards which is not divided by transverse woven heading. Not of British manufacture.

(B) Others—Not of British manufacture.

Present rate of duty	Increased rate
5¼ annas per lb.	6¾ annas per lb.
50 per cent.	75 per cent.

It is obvious that such piecemeal action cannot by any means form any permanent solution of the problems of the textile industry. The growth of India's cotton mills and the fact tht India is an equally valuable market for Japan and Britain alike invested the problem of the Indian cotton textile industry with an international importance. In the belief that the cotton textile industry could be treated in the traditional way of affording the maximum protection consistent with the interests of Lancashire, or, to put it in another way, the minimum protection consistent with internal peace, the Government of India referred the question to the Tariff Board. Before the Board could complete the report, the menace of Japanese dumping grew to unexpected proportions. The Tariff Board had to issue an emergency report. By the time the full report was submitted in Septber 1932, the relative importance of the various considerations governing the Government's policy had changed. And thus was India treated to the strange spectacle of Government taking piecemeal action, while at the same time holding back from the public the results of a full-fledged Tariff Board enquiry. The Government, presumably in deference to the wishes of Whitehall, could do nothing that would prejudice the chances of Japan and Britain coming to an agreement on the question of the market for piecegoods in the Far East. The report of the Tariff Board, which was published in the middle of 1934, thus lost all practical importance, as compared with the Indo-Japanese Trade agreement and the Mody-Lees Pact, which was concluded between Mr. H. P. Mody and Sir William Clare-Lees the representative of the British Cotton textile interests, who conducted the futile talks with the Japanese Trade Delegation in India. The conclusions of the Tariff Board enquiry are set out in the tabular statement appended at the beginning of the Industries section of the *Year-Book*. But what the Government did to the cotton textile industry was only to incorporate in the Cotton Textile Protection Act of 1934 the provisions of the Indo-Japanese Trade Agreement and the Mody-Lees Pact, the contents of which are summarised below:

TEXTILE AGREEMENTS.

INDO-JAPANESE AGREEMENT.

(1) Japan and India. shall reciprocally accord the 'most favoured nation treatment' to any article, the produce or manufacture of the other country.

(2) Negotiations to be held concerning the modification of customs tariff, subject to the reservation by both countries of the

right to make such changes in their customs tariffs as may be necessary for the protection of their own interests.

(3) The Government of India shall have the right of imposing or varying from time to time special rates of customs duty on articles the produce or manufacture of Japan other or higher than those levied on similar articles the produce or manufacture of any other country at such rates as the Government of India may consider to be necessary to correct the effects of any variation of the exchange value of the yen relative to the rupee subsequent to December 31, 1933. Reciprocally the Government of Japan shall have the right of imposing or varying special rates of customs duties similar to those to which reference has just been made on articles the produce or manufacture of India under similar circumstances and subject to similar conditions, provided that such right should not accrue to the Government of Japan, unless the exchange value of the rupee relative to the yen shall be depreciated below the value of 1732 yen.

(4) The Customs duties to be imposed by the Government of India on Japanese cotton piecegoods should not exceed the following rates ; Duty on plain greys 50 per cent. *ad valorem* or 5¼ annas per pound ; duty on others 50 per cent. *ad valorem*. It is understood that the Government of India shall not impose on Japanese cotton piecegoods other than plain greys a specific duty exceeding 5¼ annas per pound subject to the agreement concerning the most favoured nation treatment.

(5) The quantity of Japanese cotton piecegoods to be exported to India in the period of one year beginning from the 1st April shall be limited within a quota which shall be fixed in accordance with the quantity of Indian raw cotton exported to Japan in the period of one year beginning from the 1st January of the same year.

(6) (1) Basic quota of Japanese cotton piecegoods to be exported to India in a piecegoods year shall be three hundred and twenty-five million (325,000,000) yards and it shall be linked with one million (1,000,000) bales of Indian raw cotton exported to Japan in the corresponding cotton year; (II) In case the export of Indian raw cotton to Japan in any cotton year should fall below one million (1,000,000) bales, the quota of Japanese cotton piecegoods for the corresponding piecegoods year shall be determined by reducing the above basic quota at the rate of two million (2,000,000) yards for every ten thousand (10,000) bales of deficit; (III) In case, however, such export in any cotton year should exceed one million (1,000,000) bales the quota of Japanese cotton piecegoods for the corresponding piecegoods year shall be determined by increasing the above basic quota at the rate of one million and five hundred thousand (1,500,000) yards for every additional ten thousand (10,000) bales, provided that the quota should in no case exceed four hundred million (400,000,000) yards; (IV) In case the export of Indian raw cotton to Japan in any cotton year should exceed one million and five hundred thousand (1,500,000) bales the quantity thus exported in excess of one million and five hundred thousand (1,500,000) bales shall be for the purpose of determining the relevant quota of Japanese cotton piecegoods added to the quantity of raw cotton exported to Japan in the following cotton year; (V) In respect of both cotton piecegoods and raw cotton the exported quantity shall be deducted from the imported quantity. (2) Two half-yearly instalments of the quota: (1) A piecegoods year shall be divided into two half-yearly periods the first half-yearly period running from the 1st April to the 30th December and the second half-yearly period from the 1st October to the 31st March of the following year, (II) The quota for the first half-yearly period shall be two hundred million (200,000,000) yards; (III) The quota for the second half-yearly period shall be provisionally fixed at the quantity which will be derived by deducting two hundred million (200,000,000) yards from the yearly quota calculated on the basis of the estimated export of Indian raw cotton to Japan in the corresponding year. The adjustment of the export of Japanese cotton piecegoods to India shall be made by the end of the said period on the basis of the exact quantity of Indian raw cotton exported to Japan in the corresponding cotton year, subject to the rules of the allowances between the periods; (IV) A transfer from the quota of the second half-yearly period shall be permitted up to a maximum of twenty million (20,000,000) yards from the second half-yearly period to the first half-yearly period of the succeeding piecegoods year and vice versa. (3) The quota of cotton piecegoods shall be classified into the following categories in conformity with the following percentages: plain greys forty-five (45) per cent., coloured and other thirty-four (34) per cent. The percentage alloted to each of the above

categories may be modified subject to the following conditions: (1) The increase in the category either of bordered greys or bleached shall not exceed twenty (20) per cent. of the quantity allotted to that category and the increase in any other category shall not exceed ten per cent. of the quantity allotted to that category; (II) The quantity transferable from the category either of bordered greys or bleached shall not exceed twenty (20) per cent. of the quantity allotted to the category and the quantity transferable from any other category shall not exceed ten (10) per cent. of the quantity allotted to that category and (III) The total quota of cotton piecegoods for any piecegoods year shall not be increased by the above modification of the quantity alloted to each category. (4) It is to be noted that the provision that the allotment for the first part of the cotton piecegoods year shall be 200 million yards in the event of the purchase of raw cotton by Japan being less than the quantity which would justify a total yearly quota of this amount. (5) It has been agreed upon that the terms of the new treaty shall remain in force throughout its full term whether or not Burma is separated. The treaty shall come into effect immediately after the exchange of ratifications and shall remain in force until the 31st March 1937.

INDO-BRITISH TEXTILE AGREEMENT.

Following the conferences between representatives of the Indian and British Cotton Textile Industries which opened in Bombay on 19th September 1933, an understanding has been reached to which the respective parties are the Millowners' Association, Bombay, and the British Textile Mission to India:—

The following headings of agreement have been adopted on the assumption that the cotton duty is not increased above the present level of half an anna per pound:—

(1) It was agreed that the Indian Cotton Textile Industry is entitled, for its progressive development, to a reasonable measure of protection against the imports of United Kingdom yarns and piecegoods. It was also agreed that under present conditions, owing to lower costs and other factors operating in foreign countries, the industry required a higher level of protection against them than against the United Kingdom.

(2) As regards cotton piecegoods, it was agreed that if and when the revenue position of the country made it possible for the Government of India to remove the general surcharge on all imports in October 1931, the Indian side would not make fresh proposals with regard to the duties applicable to the United Kingdom imports.

(3) In the matter of cotton yarns, the Indian side has agreed that so far as imports from the United Kingdom are concerned, the duty may be 5 per cent. *ad valorem* with a minimum specific duty of $1\frac{1}{4}$ annas per pound.

(4) So far as artificial silk piecegoods are concerned, the Indian side agreed that in the case of the United Kingdom, the duties may be as follows:—

30 per cent. *ad valorem* or $2\frac{1}{2}$ annas per square yard for hundred per cent. artificial silk fabrics; and

30 per cent. or 2 annas per square yard for mixture fabrics of cotton and artificial silk.

(5) In so far as the Empire and other overseas markets for piecegoods and yarns are concerned, it is agreed that any advantages which might be arranged for British goods should be extended to Indian goods, and that India, in markets in which she has no independent quota, should participate in any quota which might be allocated to the United Kingdom. In respect of overseas markets in which Indian mills lack established connections, it is agreed that the Manchester Chamber of Commerce should use its good offices to bring about contacts between Indian manufacturers and British houses which are already established in those markets.

(6) In regard to raw cotton, the Indian side strongly emphasized the urgent necessity of further efforts being made in the United Kingdom to popularise and promote the use of the Indian raw material. They welcomed the undertaking that the British Textile Mission would be prepared to recommend effective action being taken and keep the Indian side regularly in touch with developments. It was further agreed that other avenues of co-operation in this field should be explored in the interests of the Indian cotton grower.

This understanding is limited in its duration to the period ending on 31st December 1935. The statement is signed by Mr. H. P. Mody, Chairman, Millowners' Association, Bombay and Sir William Clare-Lees, Chairman, British Textile Mission.

INDUSTRIAL SECTION:

THE OIL INDUSTRY

There are two distinct petroleum areas in India—one in the East including Assam and Burma and the other in the West comprising the Punjab and Baluchistan. The Eastern belt is by far the most important of the two. It is from the Burmese fields that more than 9/10ths of the indigenous petroleum is obtained. The largest yielding oilfields are found in the Irawaddy Valley and the Yenangyaung field is the best known and the oldest. But, the production figures of recent years show that the place of Yenangyaung is being steadily taken by the Singu field. In a few years it will, undoubtedly, usurp the position so far held by the older field.

Though native wells have been at work for over 100 years, the modern oil industry. dates only from about 1870. Several companies were started, but only four major companies survived. Of these, the best known is the Burmah Oil Company which was established in 1886. The Company began drilling operations in 1887, and the first well was completed in 1889. The Company has made steady progress. The development of the refining machinery has throughout kept pace with the increasing production ; and the crude oil handled monthly by the refining machinery at the present time is more than seven times the volume handled during the whole year in 1889.

There has been scarcely any petroleum area in the whole of India which has not been examined. The most promising of these areas have been put to the test of the drill. However, attempts to develop them on a commercial scale have not been successful except in Assam and the Rawalpindi district of the Punjab. The Burma oilfields are the mainstay of the oil industry in India.

During the early days, the crude petroleum was transported from Upper Burma by flats and river steamers. This method was one of uncertainty ; and in 1908 a pipe line was laid from the fields to Rangoon for the transport of crude oil. In early years the Burma Oil Company had to encounter bitter competition from the importers from Dutch East Indies, America, Russia and Roumania ; but from 1905 up till 1932 the market in India for Indian oil has been secure. And with the security, reduction in prices was possible. Between the year 1919 and 1923 the company was responsible for a saving of £16 million to the Indian consumer. The company produces the whole range of petroleum products--petrol, kerosine, gas oil, jute batching oil, wax, candle and lubricants. The Company, in association with the Tata Iron and Steel Company has established a tin-plate factory for the manufacture of tin boxes. The yearly output is nearly a million boxes.

The other important companies in India are the Indo-Burma Petroleum Company and the British Burma Petroleum Company. The Indo-Burma Petroleum Company originally started as a wholly Indian concern. Messrs. Steel Bros., the present managing agents, became associated with the concern in 1908. The company has been throughout very successful and has developed large fields for the production of petroleum. The British Burma Petroleum Company was established in 1910. The company has extensive properties in the Yenangyaung and Singu oilfields in Burma. Besides, the company has an interest in the Comodora Rivadavia Field in Argentine through the Eastern Petroleum and Finance Company, Ld.

Petroleum Produced in India

(Quantity in Thousands of Gallons) *(Value in Thousands of Rupees)*

	1928		1929		1930		1931		1932	
	Quant	Value	Quant	Value	Quant	Value	Quant	Value	Quant	Value
Assam—										
Badarpur ...	2,731	7,12	2,036	5.09	2,841	7,10	1,985	3,13	847	63
Digboi	28,746	49,09	31,497	53,78	43,969	75,08	53,408	91.20	54,198	92,55
Masimpur ...	26	7	5	1	...	...	.	...	...	...
Patharia ...	...	...	...	...	3	1	153	24	90	8
Burma—										
Akyab	5	2	2	1	...	...	...	...	...	...
Kyaukpyu ...	15	14	15	14	15	13	13	12	13	12
Minbu ...	6,102	11,44	5,815	12,42	5,039	8,19	3,994	7,99	3,851	6,26
Singu	113,987	2,13,72	91,482	1,94,40	95,369	1,54,97	85,478	1,70,96	88,912	1,44,58
Thayetmyo ...	727	1,38	746	1,59	504	82	578	1,16	461	75
Upper Chindwin ...	2,309	1,73	2,797	2.10	2,858	2,14	2,777	2,09	4,041	3,03
Yenangyat ...	3,072	5,76	17,607	37,60	19,877	40,38	19,809	39,62	23.068	37,55
Yenangyaung ...	135,970	2,56,99	134,937	2,88,11	132,893	2,17,00	131,266	2,60,96	127,192	2,07,66
Punjab—										
Attock ...	12,254	30,64	19,209	48,02	7,662	19,16	5,558	13,89	5,900	14,75
TOTAL	305,944	5,78,10	306,148	6,43,26	311,030	5,24,98	305,019	5,91,35	308,606	5,07,91

Imports of Kerosine Oil

(Quantity in Thousands of Gallons) *(Value in Thousands of Rupees)*

From	1930		1931		1932	
	Quantity	Value	Quantity	Value	Quantity	Value
Russia	11,407	56,62	3,021	15,55	60	23
Georgia	19,156	1,03,48	19,456	98,51	28,264	1,21,86
Azerbaijan	15,677	75,06	11,753	51,87	17,212	65,24
Persia	25,965	1,33,29	11,002	51,71	18.053	98,98
Straits Settlements including Labuan ...	3,054	17,02	428	2,17	7	2
Borneo	1,888	11,91	2,235	11,41	2,182	8,72
Celebes & other Islands ...	...	...	5,502	28,09	1,313	8,21
United States of America	22,750	1,50,46	19,600	1,27,54	6,081	31.11
Other countries ...	8,592	43,86	...	...	4,920	23.02
TOTAL ...	108.489	5,91,70	72,997	3,86.85	78,092	3,57,39

Imports of Fuel Oils

(Quantity in Thousands of Gallons) *(Value in Thousands of Rupees)*

From	1930		1931		1932	
	Quantity	Value	Quantity	Value	Quantity	Value
Persia	72,703	1,38,45	72,295	1,41,87	67,939	1,31,09
Straits Settlements including Labuan ...	9,571	19,32	2,666	5,42	70	19
Borneo	24,084	51,90	25,682	54,28	26,514	52,02
Other countries ...	1,224	4,88	3,672	8,79	10,730	20,97
TOTAL ...	107,582	2,14,55	104,315	2,10,36	105,258	2,04,27

INDUSTRIAL SECTION:

THE INDIAN SALT INDUSTRY

The problem of the Salt industry in India is the problem of displacing the imported salt in the markets of Bengal and Burma with the indigenous manufacture. While other parts of India are content with the products of their own local sources of supply, Bengal has for various reasons passed into the grip of the exporter from Liverpool. The foreign salt is not only available at a price which makes it difficult for the Indian producer to compete, but its quality is also of such a high standard as the indigenous manufacturer will take some time to reach. The principal sources of indigenous salt are (1) the sea-coasts of Madras, with Tuticorin as the principal centre of production, (2) the sea-coast of Bombay which abounds in salt factories which are worked under the control of the Government (In this region are situate the works at Darsana which have become famous through the raids conducted during the Civil Disobedience Movement of Mahatma Gandhi), and (3) the salt mines of Northern India at Khewra and Warcha in the Punjab Salt Range and salt works at Sambhar, Pachbadra and Didwana in Rajputana. In Madras, the production is in the hands of private individuals and under the control of the Government. The Salt Department has a voice in the quality and in the quantity to be manufactured. With 60 factories working along the coast there is sufficient competition to ensure reasonable prices.

In Bombay, the works at Darsana are under the direct charge of the Salt Department. Government agency mnufactures large quantities at Kharaghoda. But Karachi is the premier centre of Indian salt. Private companies work under an excise system and the attacks on the foreign importers have been made from time to time by the salt producers of Karachi. Roughly speaking, Bombay, Madras and Northern India accounts each for ⅓ of the indigenous production.

As for Bengal, it is certain that in the early years of the last century, salt was derived from local manufacture by boiling or by solar evaporation along the sea-coast from Chittagong to Puri. With the advent of the East India Company, the Company's Governors and principally, Warren Hastings introduced a system of Government monopoly by which manufacturers were induced, by advances of money, to sell their entire production to Government. The Government once assured of a total control over the supply, were able to manipulate prices in order that they might make a fair profit for the Company. About the middle of the century, competition of imported salt was increasingly felt and later the indigenous industry disappeared more or less totally. The consumption of Bengal during the present times may be put at an average of 5 lakhs tons a year. The claim of the indigenous manufacturer to Bengal's custom in regard to salt needs no elaborate substantiation. For once the whole country is committed to a policy of discriminating protection it is natural that Karachi, Tuticorin, the salt mines of Northern India and even Aden, which for purposes of the salt industry is considered as part of India, should cast longing eyes on the lucrative markets in Bengal. An enquiry by the Tariff Board is suggested by the fact that the repeated efforts of the Karachi salt manufacturers to enter the Bengal market had been met on every occasion by the Salt Importers' Association of Bengal with a drastic reduction in prices. These measures of cut-throat competition have been adopted so repeatedly that there can be no question that the foreign importers were retaining their hold on Bengal mainly, if not solely, through the tactics they have adopted in regard to prices in the Bengal market.

The Government when they ordered the Tariff Board enquiry, framed the terms of reference as "whether it is desirable in the national interest that steps should be taken to encourage the production of salt in India suitable for consumption in those markets which are at present largely supplied from abroad and if so what measures they recommend." The essence of the Board's findings

is that even if the markets which are now served by the importer were to be reserved for the indigenous producer, the national gain in employment and profits is not commensurate with the privation of the consumer ; that the threat of shortage in time of war which was one of the reasons advanced for securing the Bengal market for indigenous manufacturers, would still continue as in the event of a war, Bengal will have to be supplied from Aden and Karachi ; and that, therefore, the best way of tackling the problem is to provide conditions in which Bengal would be served to an increasing extent by rail-borne salt. So far as the possibilities of the indigenous manufacture are concerned, the Tariff Board has estimated that salt of superior quality could be produced within a few years ; and they therefore recommended that Government should undertake a thorough survey of the possible sources with a view to determine the extent to which the Bengal market may be supplied by rail with fine, white crushed salt. The Tariff Board also addressed itself to the question of protecting the indigenous manufacturer from the vagaries of the importer. They had clear evidence before them as to the questionable methods adopted by the importers to keep the indigenous manufacturers out of Bengal. But at the same time, they were impressed with the fact that domestic production could not grow all of a sudden to the extent of meeting of the whole of the demand. They, therefore, formulated a scheme of a Salt Marketing Board which was to be in constitution like that of a Public Utility company. The function of the Marketing Board is to buy the entire output of indigenous salt both from the Government and from private manufacturers and then meet the excess requirements over indigenous production by purchases from the foreign importer. It should be the aim of the Board to maintain stability of prices at a level at which they would be fair to the consumer and which will allow the indigenous industry scope for economic expansion.

In pursuance of the suggestion of the Tariff Board that a fuller investigation into the possibilities of expanding the existing sources of supply and the effect of such expansion on prices should be undertaken, the Government of India appointed the Salt Survey Committee consisting of Sir Chunilal Mehta and Mr. C. H. Pitt, General Manager of the Northern Salt Range Division. The report of this Committee was submitted in February, 1931. After a detailed examination, the Committee came to the conclusion that "there is no ground for assuming that with imports from Aden, India cannot be made easily self-supporting in the matter of salt supply, and that even the continent itself can, when areas suitable for salt manufacture but at present lying idle are developed, supply all the crushed salt that India needs." It is interesting that this conclusion was arrived at by the Salt Survey Committee, though they were asked to examine only the possibilities of Karachi, Okha and Morvi and Northern India Salt Range and not the possibilities either on the east coast or on the south coast. The Salt Survey Committee went into the question in detail and reinforced the recommendation of the Tariff Board that higher prices should be charged locally and should be utilised for a reduction in the price in Bengal markets since prices not fully commensurate with the higher cost of freight for a distant market are a well-known and accepted commercial practice. The Committee also obtained from the Railway Board reduction in the rate from Khewra.

Throughout the period in which the question of protection for salt industry was being considered by successive committees, there was a somewhat acrimonious controversy conducted ostensibly on behalf of the interests of the Bengal consumer and against the selfish greed of the salt manufacturers of the Western Presidency. Though it is unquestionable that protection for the salt industry would mean something of a sacrifice on the part of the Bengal consumer and a new opportunity for profit for capitalists in Bombay, it would undoubtedly be unreasonable for any section to oppose the only means open to us of developing the indigenous salt industry and of securing for it the fullest scope in the internal market. When the time for considering the recommendations of the Tariff Board came, the Legislative Assembly decided, both in view of the controversy referred to above and in view of the complicated nature of the institution of a marketing board, as suggested by the Tariff Board, to refer the question to a Committee of the Assembly in which Bengal interests were adequately represented. The recommendations of the Committee including Bengal representatives were in substantial agreement with the recommendations of the Tariff Board ; and they may be summarised as follows:—

"(1) That an additional duty of 4½ as. per maund on salt imported by sea into British India should be imposed without delay.

(2) In order to ensure to the Indian producer a fair selling price recommended by

the Tariff Board, the executive should be empowered to increase this duty by one anna per maund if the price of foreign salt falls below its present level.

(3) The imported Indian salt should get a rebate equal to the additional duty if the producer undertook to sell to the Government quantities of salt up to a fixed maximum at the fair selling price recommended by the Tariff Board.

(4) The fair selling price recommended by the Tariff Board was Rs. 63-11 per 100 maunds ex-ship. Taking the present price of imported salt at Rs. 36 per 100 maunds a duty of 4½ annas per maund would mean a duty of Rs. 28-2 per 100 maunds and the price would, therefore, be Rs. 64-2 per 100 maunds ex-ship, which is very near the figure suggested by the Tariff Board.

The Bill for the temporary additional duty of 4½ annas per maund on imported salt was introduced in the budget of 1931 and in spite of the strenuous opposition the bill was passed by the legislature. The opposition of Bengal was, however, placated by an express provision that 7/8 of the additional revenue should be distributed among the provinces where the salt liable to the new duty is likely to be consumed; for it is important in this context that not all the salt imported into Calcutta is consumed by Bengal, Assam and Bihar and Orissa have an appreciable offtake of the total imports. In March 1933 the customs duty was reduced by 2 annas.

SALT

Year		Production Quantity in 1,000 tons	Production Value Rs. 1,000	Import Quantity in 1,000 tons	Import Value Rs. 1,000
1915-16	...	1,745	99,03	548	1,89,61
1917-18	...	1,427	1,49,04	336	2,20,08
1919-20	..	1,891	1,82,35	666	2,09,52
1921-22	...	1,533	1,11,32	472	1,51,68
1923-24	...	1,781	1,12,40	474	1,10,28
1925-26	...	1 295	76,42	560	1 04,20
1927-28	...	1,611	1,13,80	596	1,74,84
1929-30	...	1,709	1,13,14	643	1,30,39
1931	...	1,839	1,36,41	529	80,43
1932	...	1,611	1,19,53	553	82,32

Production figures relate to Calendar year, and are inclusive of Indian States.

Value figures prior to 1922, are inclusive of duty.

BANKING SECTION:

BANKING IN INDIA 1933-34

1933-34 is generally felt and acknowledged to be in many respects a better year for trade and finance than any previous year since the beginning of the depression. The general feeling that the bottom of the depression had not been touched and that there might be worse to follow had disappeared before the beginning of the period under review. And though it was not till a later stage in the year that any sign of positive improvement was noticeable, the pressing difficulties and embarrassments of the banks vanished during the course of 1932-33. The position of Indian banks, for reasons which should not be difficult to divine, has always been closely bound up with the state of Government credit and the price of Government securities. The trading profits of Indian banks are less in most cases, compared to the strength which they derive from a high level of Government security prices and the profits which they make from time to time from their operations in giltedge. The slump in giltedge, though by no means the most marked feature of the economic depression, hit Indian banks hard, as it made it necessary for them in a year of exceptionally low profits to provide for heavy depreciation in Government securities. The lifting of the depression in giltedge may, therefore, be regarded as the most salient feature of the history of banking during the last two years. It is true that the debacle which occurred in gilt-edge following the closing of the first issue of 3½ per cent. 1947-50 in May 1933 was from more standpoints than one a very regrettable development. The banks would have been hard put to it to provide for depreciation if the slump had continued up to the end of the year. That in spite of the difficulties in the way giltedge came into its own before the year under review is a matter for which banks have to feel particularly gratified.

As regards the position of internal and foreign trade, the improvement, which has occurred in Railway earnings points to a better and a wider field for investments for banks operating within the country. But the improvement is very limited in scope, and one might wonder whether it compensated fully for such embarrassments as must have continued as the legacy of the abnormal trade depression. The improvement in foreign trade during the year 1933-34 is much more marked. But in this sphere also the expansion of the export trade has been very nearly offset by the fall in imports. The exports of gold continued to provide the main turn-over for the exchange banks.

In the absence of improvement in international business conditions such as call for a large volume of advances from banks, banks and financial institutions were thrown on Treasury Bills as the main avenue of investment. Money rates were on the low side. The Imperial Bank of India's official rate remained unchanged at 3½ per cent. since as long ago as February 16, 1933. It can be imagined that any reasonable pretext for increasing the bank rate would have been readily availed of by the Imperial Bank as manifestly in its own interest. Inasmuch as the bank did not feel called upon to raise the rate, it may be taken that the pressure of demand for credits on the available supplies was never such as to warrant an increase in the official minimum. On the other hand, there was more than one stage in the year in which the case for further reduction in the bank rate could be, and was, made with great force. From all this it will be seen that the short-term debt of the Government of India could not afford the banks any highly remunerative source of investment. The wish for high prices of giltedge and high yields on the Government's Treasury Bills would, perhaps, be like wishing to eat the cake and keep it too. But there is no denying that for a greater part of the year, Treasury Bills rates were very much on the low side. Starting at a rate of Re. 1-3 per cent. per annum in the beginning of the year, the average rate of accepted tenders was down by the middle of August to 12 annas 11 pies per cent. The recovery was slow; and it was

not until the last week of November, 1933 that it exceeded Rs. 2 per cent. The first week of 1934 saw the highest rate for the year at Rs. 2 11as. 11ps. per cent. And thereafter the rate kept about the level of 2 per cent. In these circumstances, it is not to be expected that the exchange banks could import funds from abroad for the purpose of investment in the Government of India's short term debt. Though sometimes the balance between maturities and sales of treasury Bills was upset, the Treasury did not feel it at any time necessary to raise the rate to a level at which foreign funds could flow in. It might also be said that, unless gold exports fail in the future and the problem of maintaining the rupee becomes serious and urgent, we have left behind the phenomenon of large foreign credits in India. This meant that far the greater part of Indian Government's Treasury Bills is taken up by Indian banks. And though the yield on such investments is low compared to the high yields of earlier years especially of the pre-devaluation period, the banks have been on the right-side and the general outlook of investments in bank shares has brightened up very considerably.

The following table giving the prices of important bank scrips in India will show that all of them have increased and that the outlook is accepted on all hands to be distinctly brighter.

	29-3-33			29-3-34		
	Rs.	A.	P.	Rs.	A.	P.
Imperial Bank shares	1,220	0	0	1,270	0	0
Bank of India	101	8	0	105	0	0
Central Bank	21	14	0	23	10	0
Allahabad Bank	..			...		
Chartered Bank	£ 14	0	0	£ 16	2	6
National Bank of India	£ 45	0	0	£ 50	10	0

As for banks outside the circle of Indian joint stock and exchange banks, the data on which conclusions may be based are altogether meagre. Their financial stability and their capacity for making profits alike depend on the state of the agriculturists. To the extent that commodities like cotton and wheat are undergoing an improvement in prices, areas in which they are grown have seen an improvement in the position of the banks. But throughout the year under review indigenous banking in the rice-growing areas continued to experience difficulties.

To some extent the report of the working of the co-operative banks during these years affords a reliable clue to the general economic position. A scrutiny of the provincial reports reveals that two sets of changes have been at work. On the one hand, the closure of defunct and inefficient institutions and the increase in the percentage of arrears of repayments have been on the increase. On the other hand, there is evidence of a growing determination on the part of co-operatives to strengthen the existing institutions and make them a more complete success. This means that the stage has arrived when, if means could be found for the liquidation of the past, the growth in the future would be easier than at any earlier period of the depression. In indigenous banks, especially, in the south, the better experiences of the depression years have not been without their soul of good. There is a movement, now by no means large-scale, but with most unquestionable potentialities of growth, towards the conversion of existing proprietary and partnership institutions into joint stock banks. Though one might take the view that the advantages of joint stock banking over private institutions, such as have been functioning in the past, are not decisive, the development is to be welcomed, as facilitating the unity of the Indian money market which it should be one of the aims of the Reserve Bank to achieve. Though 1933-34 cannot be classed as a year of prosperity, Indian banking may be said to have turned the corner in this period; and if there is to be reconstruction under the aegis of the Reserve Bank, one may well feel confident that such reconstruction will not have to be achieved in the face of declining prosperity or fear of any crisis.

BANKING SECTION:

REVIEWS OF BALANCE SHEETS

(OF THE MORE IMPORTANT BANKS DOING BUSINESS IN INDIA)

Bankers to the Govt.:

IMPERIAL BANK OF INDIA.

The Imperial Bank of India was constituted in 1920 by the amalgamation of the 3 Presidency banks and commenced business in January, 1921. It is not only the leading commercial bank in the country but it is also a bankers' bank fulfilling to a certain extent the functions of a central bank. The bank's profits in recent years was affected by the heavy depreciation in Indian Government securities and it was necessary in 1931 to transfer Rs. 45 lakhs from the public reserves and Rs. 69 lakhs from inner reserves to write down securities to market value. Since then, during 1932 and 1933 a total sum of Rs. 22,50,000 has been transferred from profits to Reserve Fund bringing it to the figure of Rs. 522.5 lakhs. For the year ended December 31, 1931, the dividend was reduced to 12 per cent. from the customary dividend of 16 per cent. paid since the inception of the bank and the rate of 12 per cent. has been maintained for the years 1932 and 1933 also. There has been an increase in the portfolio of commercial bills by Rs. 6,41,000 as compared to the previous year. At 31st December, 1933 while Public Deposits have decreased by Rs. 62.85 lakhs, other Deposits have increased by Rs. 5.76 crores. There has been a decrease in the cash holding of about Rs. 2.37 crores, and an increase in bills by Rs. 6.41 lakhs. The percentage of liquid assets to total deposits has increased by nearly 11 per cent. The Managing Governors of the Bank are Sir Osborne A. Smith and Mr. W. Lamond.

Liabilities—

(In Rupees—000's omitted).

	1931.	1932.	1933.
Capital ...	5,62,50	5,62,50	5,62,50
Reserves ...	5,00,00	5,17,50	5,22,50
Total of Capital & Reserves ...	10,62,50	10,80,00	10,85,00
Public Deposits ...	8,32,11	7,06,95	6,44,10
Current, Fixed and other Deposits	63,85,64	68,36,35	74,12,77
Total of Deposits	72,17,75	75,43,30	80,56,87
Due to Government	2,50,00		

Assets—

Cash ...	11,03,95	20,97,00	18,59,76
Giltedge investments ...	30,26,65	32,03,63	47,02,96
Bills discounted ...	4,60,82	1,96,67	2,03,08
Total of Liquid Assets ...	45,91,42	54,97,30	67,65,80
Loans & Advances	37,13,04	28,63,45	20,95,56
Percentage of total Capital and Reserves to total Deposits ...	14.7	14.3	13.5
Ratio of Liquid Assets to total Deposits ...	63.6	72.9	84.0

Profit and Loss Items—

Brought forward	12,56	14,05	25,46
Profits ...	74,00	97,93	1,12,06
Dividend distribution ...	67,50	67,50	67,50
Allocation to Funds ...	5,01	19,02	6,22
Carried forward ...	14,05	25,46	26,86
Dividend Rate per cent. ...	12	12	12

Indian Joint Stock Banks:

THE ALLAHABAD BANK, LTD.

The Allahabad Bank is one of the oldest of Indian joint stock banks, established in the year 1865. Its original Head Office was Allahabad but since its affiliation to the P. & O. Banking Corporation about 10 years ago, its registered office has been transferred to Calcutta. Though affiliated to the P. & O. Bank, it has maintained its entity intact and continued loyal to the traditions and nature of business it has from the beginning built up. The Allahabad Bank has devoted special attention to branch banking and finance of produce. Its branches are spread practically throughout the United Provinces and a good part of the Punjab. The bank has also branches at other important centres like Bombay, Rangoon, Karachi, Nagpur, etc. In the field of produce finance, it did considerable pioneer work ; and though new entrants into the field seek to cut into its business, the facilities which the Allahabad Bank has

always offered, and is ever in a position to offer, should retain for it, its own clients and connections and business.

The profits for the year ending 31st March, 1934 show an increase of Rs. 50 lakhs, and dividend has been maintained at 18 per cent. per annum. The Bank's year closes as at March 31.

(In Rupees—000's omitted).

	1931-32	1932-33	1933-34
Liabilities—			
Capital ...	35,50	35,50	35,50
Reserves ...	44,50	44,50	44,50
Total of Capital and Reserves ...	80,00	80,00	80,00
Current Deposits	1,95,67	2,29,32	2,45,22
Fixed and other Deposits ...	7,98,79	8,52,27	7,79,91
Total Deposits ...	9,94,46	10,81,59	10,25,13
Assets—			
Cash ...	1,26,82	1,23,44	1,38,81
Giltedge investments ...	5,36,23	5,82,84	4,86,83
Total of Liquid Assets ...	6,63,05	7,06,28	6,25,64
Loans, Bills Discounted, Pronotes and other investments ...	1,20,14	99,06	86,69
Cash Credits and overdrafts ...	2,64,36	3,25,79	3,65,13
Percentage of Capital and Reserve to total Deposits	8.0	7.4	7.8
Percentage of total Liquid Assets to total Deposits ...	66.7	65.3	61.0
Profit and Loss Items—			
Brought forward	4,24	3,69	4,85
Profits ..	5,54	5,75	5,90
Dividend distribution ...	4,59	4,59	4,59
Allocation to Funds	1,50	...	...
Carried forward ...	3,69	4,85	6,16
Dividend Rate per cent. ...	18	18	18

THE BANK OF BARODA.

The Bank of Baroda was started during the closing years of the first decade of this century under the patronage of, and largely supported by, the Government of H. H. the Maharaja, Gaekwar of Baroda. The Chairman of the bank is Sir Lalubhai Samaldas, Kt., C.I.E., : and the General Manager at the Head Office is Mr. C. E. Randle. The bank has 16 branches of which a good number are situated in Baroda State. The bank is entrusted with the State's Treasury work in the same way as the Imperial Bank carries out the Treasury work of the Government of India. It has also branches at important centres like Bombay, Ahmedabad, Surat, etc. The paid up capital of the bank is Rs. 30 lakhs. Owing to the heavy depreciation of Government securities in 1931, it was found necessary to transfer Rs. 5.25 lakhs from the Reserve Fund. The subsequent appreciation of Government securties has left the bank possessed of a secret reserve to the extent of the difference between the market value and written down value of the securities. The deposits of the bank have fallen by about Rs. 1.9 crores as compared with the deposits of the previous year. Profits have been well maintained and the usual dividend of 10 per cent. has been paid. The percentage of total liquid assets to deposit liabilities is exceptionally high at 76.3 per cent.

(In Rupees—000's omitted.)

	1931	1932	1933
Liabilities			
Capital ...	30,00	30,00	30,00
Reserves ...	19,40	20,00	20,75
Total of Capital and Reserves ...	49,40	50,00	50,75
Current Deposits	2,30,14	3,09,24	2,44,14
Fixed and other Deposits ...	4,40,27	4,23,52	2,95,08
Total of Deposits	6,70,41	7,32,76	5,39,22
Other Liabilities	7,40	8,71	6,20
Assets—			
Cash ...	84,49	92,35	73,56
Giltedge investment ...	3,85,84	3,97,50	3,37,62
Bills discounted ...	...	7	20
Total of Liquid Assets ...	4,70,33	4,89,92	4,11,38
Loans and Discount ..	2,39,00	1,99,26	1,65,54
Properties ...	17,76	17,61	20,54
Other Assets ...	2,95	81,75	1,76
Percentage of Capital and Reserves to total Deposits	7.4	6.8	9.4
Percentage of Total Liquid Assets to Total Deposits ...	70.2	66.9	76.3
Profit and Loss Items—			
Brought forward ...	37	59	60
Profits ...	3,97	4,06	3,96
Dividend distribution	3,00	3,00	3,00
Allocation to Funds	60	75	75
Bonus to Staff ...	15	30	25
Carried forward ...	59	60	56
Dividend Rate per cent. ...	10	10	10

THE BANK OF INDIA, LTD.

The Bank of India, registered in 1906, is by far the most comfortably situated amongst Indian banks. Its Balance Sheet is neat and natty ; and its business is of the soundest description. The Directors have never sought to achieve anything sensational and

have ever been content with slow progress so long as it is steady. The Bank of India has a most illustrious and influential Board of Directors, with Mr. F. E. Dinshaw, as Chairman. The Manager is Mr. A. G. Gray. The bank has been fortunate in having restricted its holding of Government securities to a comparatively small figure, with the result that while other banks were faced with an exceptionally heavy shrinkage in their giltedge portfolio, the Bank of India was least affected by the debacle in security prices. A sum of Rs. 7½ lakhs was transferred from profits for writing down Government securities and the uncovered deficit on short-term Government Bonds was as low as Rs. 15 lakhs. With the appreciation in Government securities in 1932, it has been found possible to transfer the Rs. 7½ lakhs to the general reserve fund. A further sum of Rs. 50 thousands has been transferred from Reserve for contingencies to the Reserve Fund, thus bringing it to the figure of Rs. 1 crore. The dividend has been maintaind at 10 per cent.

(In Rupees 000's omitted).

	1931.	1932.	1933.
Liabilities -			
Capital ...	1,00,00	1,00,00	1,00,00
Reserves ...	94,00	1,01,50	1,01,50
Total of Capital and Reserves ...	1,94,00	2,01,50	2,01,50
Current Deposits	4,79,00	6,90,59	6,11,18
Fixed and other Deposits ...	8,16,47	8,17,05	8,38,63
Total Deposits ...	12,95,47	15,07,64	14,49,81
Assets—			
Cash ...	2,25,64	2,27,23	2,44,78
Giltedge Investments ...	6,03,72	8,44,39	8,15,48
Total Liquid Assets ...	8,29,36	10,71,62	10,60,26
Other Investments	10,89	8,66	10,53
Loans, Advances, etc. ..	6,49,49	6,31,77	5,92,61
Percentage of Capital and Reserve to Total Deposits	15	13.4	13.9
Percentage of Liquid Assets to Total Deposits ...	64.0	71.1	73.1
Profit and Loss Items—			
Brought forward ...	4,44	3,39	3,41
Profits ...	19,77	12,36	13,52
Dividend Distribution ...	10,00	11,00	10,00
Allocation to Funds	7,50	...	1,00
Carried forward ...	3,39	3,41	4,32
Dividend Rate per cent. ...	10	11	10

BANK OF MYSORE.

The Bank of Mysore, started in 1913, is to the Government of Mysore what the Imperial Bank is to the Government of India. Its progress has been steady and satisfactory. The paid up capital is Rs. 20 lakhs; and the reserve fund is Rs. 18.75 lakhs; while the building fund stands at Rs. 2.25 lakhs. The Bank has maintained deposits roundabout Rs. 2 crores. In 1930 there was a considerable increase in deposit which touched Rs. 2.31 crores. In 1932 however, there was a fall; and the figure was Rs. 1.94 crores. The profits of the Bank at the end of 1933 show an increase of Rs. 19,000 over 1932. The Bank of Mysore has transferred another Rs. 1.25 lakhs to reserve fund, bringing it to the figure of Rs. 18.75 lakhs. Just as in the previous year, the Bank paid a dividend of 12 per cent. in 1933, and a bonus of Re. 1 per share. The intrinsic position of the Bank, judged by every criterion, remains exceptionally strong. The management is in the hands of Mr. P. W. O'Brien.

(In Rupees omitted)

	1931.	1932.	1933.
Liabilities—			
Capital ...	20,00	20,00	20,00
Reserves ...	16,75	17,50	18,75
Total of Capital and Reserves ...	36,75	37,50	38,75
Current Deposits ...	77,70	75,94	76,31
Fixed and other Deposits ...	1,21,81	1,42,14	1,17,48
Total of Deposits ...	1,99,51	2,18,08	1,93,79
Assets—			
Cash	22,18	27,84	28,21
Giltdedge Investments	69,81	92,22	65,68
Bills discounted ...	7,60	5,61	5,30
Total of Liquid Assets	99,59	1,25,67	99,18
Loans and Advances	1,39,04	1,38.30	1,37,36
Properties, etc. ...	4,93	3,88	4,02
Percentage of Capital and Reserves to Total Deposits ...	18.4	17.2	20.0%
Percentage of Total Liquid Assets to Total Deposits ...	49.9	57.6	51.2%
Profit and Loss Items—			
Brought forward ...	26	30	51
Profits ...	4,27	4,25	4,44
Dividend distribution	2,40	2,60	2,60
Allocation to Funds	1,75	1,25	1,75
Bonus to Staff ...	9	19	20
Carried forward ...	30	51	40
Dividend Rate per cent.	12	13	13

THE CENTRAL BANK OF INDIA, LD.

The Central Bank of India was started in 1911 mainly due to the efforts, enthusiasm and organising skill of Mr. S. N. Pochkhana-

wala. The latter was fortunate in securing Sir Pherozshah Mehta as the first Chairman of the Bank. Equally lucky was he in having as his lieutenant Mr. A. S. Balsekar who has, in a large measure, shared all the stress and strain of this institution in the various stages of its growth. The capital of the Bank was increased, in successive stages, till early in the last decade it stood at Rs. 50 lakhs paid up. The amalgamation of the Tata Industrial Bank to itself brought up the capital to Rs. 1,68 lakhs, so that the Central Bank has been, since then, the largest institution amongst the Indian joint stock banks. Its deposit figures also were higher than those of the others. In range of business, largeness of *clientele*, new and newer modes of service, the Central has always been in the forefront. An institution, so flourishing and so steadfastly marching onwards, has had, necessarily, its distractors and even unreasoning critics. The Bank has come out successful in all the vexatious litigation to which some of its enemies have subjected it. This kind of persecution has meant the maintenance of an unduly large liquid position so as to be prepared for runs at any time. Excessive liquid assets mean lesser margin of profits. And runs mean disorganisation of normal business. The management of the Central Bank have had to contend against heaviest odds. Despite such difficulties, the progress of the Bank has been kept up. At all times, it has been ready and able to weather even the strongest storm. That it has stood up through good report and evil report and strengthened its position all the time is a measure of its intrinsic vitality and its sound business methods ; it also shows how much headier its growth would have been if it had been left to develop unharassed and unhampered. Giltedge had been an anxious feature, during the severe fall in their values in 1931 as the Central Bank had a large giltedge portfolio in view of the need for keeping a liquid position. But that period, it may be said, is over now and the Bank's position is appreciably strengthened. The total deposits of the Bank hve increased by about Rs. 2 crores, and because of this the ratio of capital and Reserves to total Deposits has gone down by about 1%. The portfolio of bills has increased by about Rs. 8 lakhs. The Bank's profits increased in the year by about Rs. 37,000. The dividend has been maintained at 6%.

(In Rupees—000's omitted).

	1931.	1932.	1933.
Liabilities—			
Capital ...	1,68,13	1,68,13	1,68,13
Reserves ...	70,00	70,00	70,00
Total of Capital & Reserves ...	2,38,13	2,38,13	2,38,13
Current and Savings Bank Deposits and Bills Payable, &c. ...	7,41,38	11,37,97	12,27,21
Fixed Deposits ...	7,82,59	8,76,60	9,99,46
Total of Deposits	15,23,97	20,14,57	22,26,67
Due to Bankers ...	2,77,51	2,68	1,71
Acceptances, Bills for Collection, &c. ...	1,08,44	92,36	1,00,34
Assets—			
Cash ...	1,70,33	2,45,15	4,01,80
Giltedge Investments ...	10,52,24	12,22,78	11,83,08
Bills Discounted ...	44,18	31,20	39,43
Total Liquid Assets ...	12,66,75	14,99,13	16,24,31
Properties, &c. ...	1,19,69	1,10,70	1,19,60
Loans, Advances & other Investments	6,77,68	6,65,25	7,50,01
Acceptance, Bills receivable per contra	1,08,44	92,36	1,00,34
Percentage of Total Capital and Reserves to Total Deposits ...	15.6	11.8	10.7
Percentage of Total Liquid Assets to Total Deposits ...	83.1	74.4	72.9
Profit and Loss Items—			
Brought forward ...	5,00	4,08	3,56
Profits ...	17,62	14,32	14,69
Dividend distribution ...	10.09	10,09	10,09
Allocation to Funds ...	8,45	1,75	2,00
Carried forward ...	4,08	3,56	5,66
Dividend Rate per cent. ...	6	6	6

THE INDIAN BANK, LTD.

The founder of the Indian Bank was the late Mr. V. Krishnaswamy Iyer, no less renowned as a patriot and a Congress worker than as a judge of the High Court and a Member of the Executive Council of Madras. The bank was the recipient of considerable patronage of local depositors partly as a recoil from the Arbuthnot disaster and partly by its appeal to parochial patriotism. On the advice of Sir Lallubhai Samaldas, Mr. Vidyasagar Pandya was appointed as the first Secretary and he served the bank in this capacity for more than two decades. The progress of the Bank which was steady till a few years ago, has since been somewhat arrested, and it is to be expected tha' the Directors will devise

new plans to restore the old pace of growth. The bank with its head office at Madras has 16 branches distributed throughout South India. The Chairman of the Board of Directors is Mr. H. Md. Abdul Azees Badsha Sahib and the Secretary at the Head Office is Mr. P. S. Suryasekaran. Its subscribed capital is Rs. 48 lakhs while the paid up capital is about Rs. 13 lakhs. The reserve fund which was Rs. 9½ lakhs in 1929 has grown to Rs. 12 lakhs in 1933. A contingency fund of Rs. 1.9 lakhs is available for meeting any emergencies. Deposits were Rs. 226 lakhs against Rs. 199 lakhs in 1932. The profits for 1933 showed a rise of Rs. 1,78,000 over the previous year. The dividend has been maintained unchanged at 12 per cent. Rs. 75,000 has been allocated to Reserve Fund raising it to Rs. 13 lakhs. The carry forward at Rs. 57,000 is better than last year's by nearly Rs. 25,000.

(In Rupees -000's omitted)

	1931.	1932.	1933.
Liabilities—			
Capital ...	12,79	12,79	12,79
Reserves and other Funds ...	12,96	13,89	14,07
Total of Capital and Reserves ...	25,75	26,68	26,86
Total Deposits ...	1,72,68	1,99,21	2,26,47
Assets—			
Cash	30,19	47,48	44,85
Giltedge investments	61,68	93,50	1,04,32
Total of Liquid Assets	91,87	1,40,98	1,49,17
Loans and Advances	1,03,87	71,45	1,01,88
Properties, &c. ...	6,57	19,99	10,95
Percentage of Capital and Reserve to total Deposits ...	14.9	13.4	11.9
Percentage of total Liquid Assets to total Deposits ...	53.2	70.3	65.9
Profit and Loss Items—			
Brought forward ...	39	23	32
Profits ...	2,46	1,93	3,71
Dividend distribution	1,53	1,54	1,54
Allocation to Funds	1,09	30	1,43
Carried forward ...	23	32	57
Dividend Rate per cent. ...	12	12	

THE TRAVANCORE NATIONAL BANK, LTD.

The Travancore National Bank Ltd., was incorporated in Travancore in 1912. The statement below will show the good progress made by the Bank during the past 22 years.

Year.	1912	1922	1932	1933
		(000's omitted).		
Capital ...	13	2,60	4,22	5,20
Reserve Funds ...	Nil	24	2,00	2,20
Deposits ...	19	3,75	36,69	58,33
Cash ...	...	15	5,86	8,37
Investments ...	Nil	14	4,30	10,46

During the year, four new branches were opened,—one in Bombay and three in three important commercial centres in South India. The net profit for the year after providing Rs. 10,181 for Bad Debts and Rs. 9,763 for Depreciation and Branch Preliminary Expenses, amounted to Rs. 70,071. Rs. 20,000 has been transferred to the Reserve Funds. The dividend is 9 per cent. (free of Income-tax).

(In Rupees—000's omitted)

	1933.
Liabilities—	
Capital	5,20
Reserve Funds	2,20
Total of Capital and Reserves	7,40
Total Deposits	58,58
Assets—	
Cash	8,38
Investments ...	10,46
Loans and Advances	41,28
Properties ...	1,81
Percentage of Capital and Reserve to total deposits	12.6
Profit and Loss Items—	
Brought forward ...	2
Net Profits ...	70
Dividend distribution	42
Allocation to funds	20
Carried forward ...	10
Dividend Rate per cent.	9

THE UNION BANK OF INDIA, LD.

The Union Bank of India was started in 1919; and the capital in the earlier years was Rs. 60 lakhs paid up. Since its inauguration, business conditions in Bombay, to which centre the Bank's activity is confined, have been so consistently and persistently bad that with all the competition offered by the numerous banks in the City, the Union Bank could not make any headway. The Bank was also unfortunate in regard to some of its investments, and particularly in regard to the building which it purchased for its office. In 1922-23, however, the Central Bank of India secured a controlling interest in the Union Bank by purchasing a considerable number of the shares of the latter, as a result of which the Central Bank was appointed as the Managing Agents. The result is that the Union Bank is the unique instance of a bank being managed by another bank as managing agent. Soon after the transfer of the management to the Central Bank, a reconstruction of capital was effected, so that the present position is that the paid up capital is Rs. 40 lakhs. Bad investments

were provided for in the writing down of capital as well as the difference between the purchase price and the intrinsic value of the building. The Union Bank has not set before itself any high-sounding or ambitious programme but carries on a simple, straightforward business in a small but sure way. The Bank is in an eminently satisfactory position without any swollen assets or bad debts. During the year ended March 31, 1933, the Bank had made marked progress, both in deposits and in Loans, etc., and profits were better than in 1931-32. In 1933-34 the deposits of the Bank were Rs. 51 lakhs and the profits were Rs. 2,27,000. The dividend has been maintained unchanged at 5 per cent. The Bank's financial year ends with March 31.

(In Rupees 000's omitted)

	1931-32	1932-33	1933-34
Liabilities—			
Capital ...	39,95	39,95	39,95
Reserves ...	7,00	7,00	7,00
Total of Capital and Reserves ...	46,95	46,95	46,95
Total Deposits ...	28,42	58,40	51,07
Assets—			
Cash ...	5,16	16,80	10,27
Giltedge Investments	40,23	52,84	55,39
Bills discounted ...	52	1,04	5,74
Total of Liquid Assets	45,91	70,68	71,40
Loans and Advances	28,80	33,85	25,57
Properties, etc. ...	3,98	3,80	3,88
Percentage of Capital and Reserves to Total Deposits ...	165	80	91.9
Percentage of Total Liquid Assets to Total Deposits ...	162	121	139.8
Profit and Loss Items—			
Brought forward ...	65	57	56
Profits ...	2,17	2,28	2,27
Dividend distribution	2,00	2,00	2,00
Allocation to Funds	...	...	...
Carried forward ...	57	56	54
Dividend Rate per cent.	5	5	5

Indian Co-operative Banks:

THE BIHAR AND ORISSA PROVINCIAL CO-OPERATIVE BANK LTD., PATNA.

The Bihar and Orissa Provincial Co-operative Bank has a satisfactory position as to the present and sturdy features of growth as to the future. The paid up capital of the Bank is Rs. 6.09 lakhs. The various reserve funds amount to Rs. 5.51 lakhs, besides which there is a security of Rs. 3.80 lakhs afforded by the uncalled liability of the Guarantee shares. Total deposits amount to Rs. 78.92 lakhs. Miscellaneous deposits like provident fund etc., come to about Rs. 3 lakhs. On the liabilities side, loans and advances, inclusive of interest due, amount to Rs. 64.5 lakhs. Giltedge securities are Rs. 31.8 lakhs. Throughout the year the Bank had ample funds at its command. The market price of all giltedge securities has shown a steady rise during the year. With a view of extending its activity in the direction of long-term loans to agriculturists, the Bank approached the Local Government to guarantee interest on twenty-year debentures. The Local Government accepted the proposal in August 1932. The preliminaries, however, have not yet received the final approval of the Government, but it is hoped that conclusions will be reached at a very early date.

(In thousands of Rs.)

	1932.	1933.
Liabiliti		
Capital	5,96	6,09
Reserves	5,18	5,51
Total of Capital and Reserves	11,14	11,60
Fixed Deposits	52,46	53,27
Current and other Deposits ...	17,91	25,65
Total Deposits	70,37	78,92
Due to Bankers	54	1,59
Interest payable	2,06	2,53
Assets—		
Cash	35	42
Giltedge investments ...	24,38	31,77
Total of Liquid Assets ...	24,73	32,19
Loans and Advances ..	54,34	59,39
Interest Receivable ...	4,36	5,11
Profits, etc.	1,29	79
Percentage of Capital and Reserves to Total Deposits ...	15.8	14.7
Percentage of Total Liquid Assets to Total Deposits ...	35.1	40.8
Profit and Loss Items—		
Brought Forward	1	2
Profits	79	79
Dividend Distribution ...	35	36
Allocation to Funds ...	33	33
Carried forward	2	2
Dividend Rate per cent. ...	6	6

THE BOMBAY PROVINCIAL CO-OPERATIVE BANK LTD.

Amongst the central provincial co-operative banks, the Bombay Provincial Co-operative Bank occupies an important place alike by the vastness of its resources, the wide sphere of its activity, and the genuine spirit of co-operation actuating those at the helm of affairs. The Bank has a fine network of branches, there being over thirty branches. The deposits of the Bank are roundabout Rs. 180 lakhs, against which it holds con-

siderable voume of liquid securities. The profits for the year ending March 1934 are better than the profits for the previous two years and indicate that the Bank has been able to derive some advantage from the reductions that have been made from time to time in the rates of interest paid on deposits .

As a measure of caution the Directors decided in March 1933 to pay dividends if any, only once a year, as long as the present depression continued. The dividend was reduced to 4 per cent.

The Land Mortgage branch has again incurred a small loss on the year's working. The Bank is anxious that this branch of its business which it undertook at the instance of the government should be transferred to a separate Land Mortgage Bank to be started by the Government. The Chairman of the Bank is Sir Chunilal Mehta ; and the Managing Director is Mr. V. L. Mehta, than whom India has no keener enthusiast in co-operation. The Bank closes its accounts as on March 31.

(In Rupees 000's omitted)

	1931.	1932.	1933.
Liabilities—			
Capital ...	12,97	12,97	12,97
Reserves ...	99	99	99
Debentures ...	9,80	10,42	12,80
Total of Capital Reserves & Debentures	23,76	24,38	26,76
Fixed Deposits ...	67,53	86,12	87,34
Current and other Deposits ...	51,81	86,12	87,65
Total Deposits ...	1,19,34	1,94,87	1,78,53
Due to Government	1,20	400	1,26
Assets—			
Cash ...	3,09	3,68	5,35
Giltedge Investment	33,74	96,28	83,55
Total of Liquid Assets	36,83	99,96	88,90
Loans to Co-operative Banks, etc. ...	81,06	79,53	76,66
Land Improvement Loans ...	4,40	2,49	2,28
Other Loans and Investments ...	14,90	12,48	15,60
Properties, etc. ...	64	50	47
Percentage of Capital and Reserve to total Deposits ...	19.9	12.5	15.0
Percentage of Liquid Assets to total Deposits ...	30.9	51.2	49.8

Profit and Loss Items—			
Brought forward ...	19	27	16
Profits	92	55	1,40
Dividend distribution	78	52	52
Allocation to funds ...	...	25	68
Carried forward ...	27	16	15
Dividend Rate per cent. ...	6	4	4

THE CENTRAL PROVINCES & BERAR PROVINCIAL CO-OPERATIVE BANK LTD.

The Central Provinces and Berar Provincial Co-operative Bank Limited was established 22 years ago and has always continued a cautious policy of finance and sound banking. During the year, the share capital has declined from Rs. 5.84 lakhs to Rs. 5.71 lakhs. The various reserve funds amount to Rs. 3.41 lakhs. Fixed, Savings Bank and Current deposits amount to Rs. 58 lakhs and show an increase of Rs. 11 lakhs over the previous year's deposits. On the liabilities side, loans to central Banks and societies amount to Rs. 22.38 lakhs. They also owe an additional amount of Rs. 4.39 lakhs on Cash Credit account. Since the time that arrears have been looming large and unfavourable conditions have set in, the Bank has been following a cautious policy of financing the movement. The overdues of the year are fortunately less than those of the previous year. The Bank has built a reserve of Rs. 57,500 for bad and doubtful debts. Investments amount to Rs. 79.16 lakhs. The Bank has made considerable headway in Inland Exchange business and hopes to show still better results with improved conditions of trade. Cash in hand and current account balances with banks at Rs. 1.52 lakhs show an increase of Rs. 1.39 lakhs over the previous year. Consistent with its policy of caution, the Bank has declared a dividend of only $4\frac{1}{2}$ per cent. though the Bank's financial condition allows a higher rate of dividend.

(In thousands of Rs.)

	1930-31.	1931-32.	1932-33.
Liabilities—			
Capital	6,13	5,84	5,71
Reserve Fund ...	2,10	2,10	2,15
Other Funds ...	77	79	1,26
Total of Capital and Reserves ...	9,00	8,73	9,12
Fixed Deposits ...	29,95	36,07	44,22
Current and other Deposits ...	11,88	11,30	14,14
Due to Bankers ...	1,28	3,15	40
Due to Govt. ...	48,91	45,40	47,93

Assets—			
Govt. Securities ...	59,96	64,54	65,03
Other Investments	11,30	7,51	14,13
Loans to Societies ...	21,52	24,62	26,77
Individual Demand Loans ...	17	38	90
Property ...	37	41	41
Cash	22	13	1,52
Profit and Loss Items—			
Brought forward ...	...	2	1
Profits	...	60	74
Dividend distribution	...	35	26
Allocation to funds ...	...	26	49
Dividend Rate per cent. ...	...	6	4½

THE MADRAS PROVINCIAL CO-OPERATIVE BANK, LTD.

Head Office : LUZ, MYLAPORE, MADRAS.

The Madras Provincial Co-operative Bank is, perhaps, the most puissant of the provincial central co-operative banks. Its deposits are nearly Rs. 210 lakhs. Against a paid up capital of Rs. 6.6 lakhs, the Bank has a Reserve Fund of Rs. 13.5 lakhs and a Depreciation Reserve Fund of Rs. 2 lakhs. The Madras Provincial Co-operative Bank has the unique good fortune of enjoying the goodwill of such clients as would normally place their deposits. It is, perforce, obliged to have considerable investment in Government securities, which amount to nearly Rs. 1,46 lakhs. Cash and fixed deposits with other banks amount to Rs. 23 lakhs. It will thus be seen that the liquid assets are Rs. 1,72 lakhs an extraordinarily strong position for a co-operative bank. The Bank's profits for 1932-33 are down by Rs. 29 thousands, but this must be attributed to the slump in trade. Its allocation towards depreciation are substantial. It is, perhaps, the only instance of an Indian bank which has fully met the provision for the depreciation on Government securities entirely out of the net profits. The Chairman of the Bank is Mr. Ramdas Pantulu and the Secretary Mr. V. C. Rangaswami, whose great popularity with the influential sections of Madras is largely responsible for the steady increase in the Bank's deposits. The Bank's accounting year ends with June, 30.

(In Rupees—000's omitted)

	1930-31.	1931-32.	1932-33.
Liabilities—			
Capital ...	6,53	6,53	6,59
Reserves ...	10,23	10,88	13,50
Total of Capital and Reserves ...	16,76	17,41	20,09
Total Deposits, Current, Fixed, etc. ...	1,58,56	1,68,54	2,08,36
Due to Bankers ...	...	14	22
Assets—			
Cash	12,05	13,75	25,28
Giltedge Investment	70,09	1,30,90	1,46,32
Total of Liquid Assets ...	82,14	1,44,65	1,71,60
Loans to Central Banks ...	86,97	39,61	10,75
Other Loans and Advances ...	10,64	4,67	12,90
Properties, etc. ...	24	1,72	3,38
Percentage of Capital and Reserves to Total Deposits ...	10.6	10.3	9.6
Percentage of Liquid Assets to Total Deposits ...	51.8	85.8	82.4
Profit and Loss Items—			
Brought forward ...	24	17	46
Profits ...	2,56	1,69	1,40
Dividend distribution	58	59	59
Allocation to Funds	2,05	76	81
Carried forward ...	17	46	41
Dividend Rate per cent. ...	9	9	9

THE SIND CENTRAL CO-OPERATIVE BANK LTD.

The balance sheet of the Sind Central Co-operative Bank Limited, for the year ending 31st March, 1934 shows a satisfactory increase in the work and progress of the Bank. During last year, the Hyderabad, Nawabshah and Mirpukhas District Central Banks have been amalgamated with this bank and from this year onwards the Bank will be working as the Sind Provincial Co-operative Bank Limited. This amalgamation would enable the Bank to expand its co-operative work. The Bank proposes to start co-operative seed supply and sale stores for supply of pure seed and agricultural requisites and the sale of agricultural produce. The net profit of the Bank is Rs. 56,000. Out of this, Rs. 28,000 has been transferred to the Interest Overdue Reserve Account which will now amount to Rs. 82,000. Rs. 6,979 has been added to the General Reserve Fund raising it to Rs. 91,608. The dividend has been maintained at 5½ per cent.

(In thousands of Rs.)

	1931-32.	1932-33.	1933-34.
Liabilities—			
Capital	2,89	2,90	2,95
Reserve Fund	66	73	85
Other Funds	79	1,27	2,04
Total of Capital and Reserves	4,34	4,90	5,84
Deposits ...	39,52	52,23	35,42
Due to Banks	12	28	10,70

Assets—			
Cash	3,19	3,79	2,38
Government securities	16,21	30,72	23,04
Other investments ...	14	14	13
Loans and overdrafts to Societies and Banks ...	23,85	21,65	25,29
Loans and overdrafts to individuals ...	45	8	9
Profit and Loss Items—			
Brought Forward ...	1	2	2
Profits	47	39	56
Dividend distribution	16	16	16
Allocation to funds ...	30	27	35
Carried forward ...	2	2	4
Dividend Rate per cent.	5½	5½	5½

British Banks:

THE CHARTERED BANK OF INDIA, AUSTRALIA AND CHINA.

Among the Eastern Exchange banks operating in India, the Chartered Bank of India, Australia and China is a premier institution, alike in the size of its capital and the extent of its banking resources. The bank was founded in 1853 and is one of the few banks which are at present operating under Royal charter. It has a widespread branch organisation in India, Dutch East Indies, China, Japan and Federated Malay States and has important offices in New York and Hamburg. It owns nearly 80 per cent. of the capital of the P. & O. Banking Corporation and through it controls the Allahabad Bank.

In recent years, the bank has had to operate under particularly difficult conditions in India and the Far East ; but during the past year there has been a considerable improvement in the Bank's business. Judging from the figures in the Balance Sheet as on December 31, 1933 the position of the Bank seems to have been well maintained ; the deposits are better by about £3 million and profits by £13 thousands. Cash in hand and at Bankers at £11,700,000 odd stands at the highest level ever shown in the history of the bank. The dividend has been maintained at 14 per cent.

(In Sterling—000's omitted.)

	1931.	1932.	1933.
Liabilities—			
Capital ...	3,000	3,000	3,000
Reserves	3,000	3,000	3,000
Total of Capital and Reserves	6,000	6,000	6,000
Notes in Circulation	1,965	1,895	1,357
Deposits	38,616	43,633	46,606
Acceptances, Bills Payable, etc.	6,189	3,873	3,344
Assets—			
Cash	5,626	8,431	11,702
Investments ...	11,518	15,656	16,300
Bills of Exchange ...	8,349	11,799	7,495
Loans and Advances ...	22,602	17,740	18,576
Property, Acceptance Cover, etc. ...	2,742	2,803	2,132
Shares in Allied Banks, etc. ...	2,293	2,295	2,301
Percentage of total Capital and Reserves to Deposits ...	15.5	13.7	12.9
Percentage of Cash to Deposits ...	14.6	19.3	25.1
Profit and Loss Items—			
Brought forward ...	188	149	184
Profit	382	454	467
Dividend distribution	420	420	420
Allocation to Funds	...	...	25
Carried forward ...	149	184	206
Dividend Rate per cent.	14.0	14.0	14.0

THE EASTERN BANK, LTD.

Head Office: 2 & 3, CROSBY SQUARE, LONDON, E.C. 3.

The Eastern Bank was founded in 1909 and has established branches not only in India but in Mesopotamia, Singapore and Ceylon. The balance sheet of the Bank as on 31st December, 1933, shows a decrease in deposits of £402,000 and £77,000 in cash. The profits have increased by £4,000. The Bank maintains a very liquid position as disclosed by the fact that against deposits amounting to £5.6 millions, cash, investments and bills receivable amount to £6.4 million. The dividend has been maintained at the usual rate of 6 per cent.

(In Sterling—000's omitted)

	1931.	1932.	1933.
Liabilities—			
Capital	1,000	1,000	1,000
Reserves	480	500	500
Total of Capital and Reserves ...	1,480	1,500	1,500
Deposits	5,606	6,007	5,605
Acceptances, Bills Payable, etc. ...	2,502	2,109	2,380
Assets—			
Cash	1,322	1,335	1,258
Investments ...	3,285	4,361	4,582
Bills Receivable ...	1,351	696	605
Loans and Advances ...	2,624	1,983	1,805
Property, Acceptance Cover, &c. ...	1,145	1,367	1,372
Percentage of Total Capital and Reserves to Deposits ...	26.4	25.0	26.8
Percentage of Cash to Deposits ...	23.6	22.2	22.4

Profit and Loss Items—

Brought forward ...	50	34	41
Profits	120	122	126
Dividend distribution ...	60	60	60
Allocation to Funds ...	75	55	55
Carried forward ...	34	41	52
Dividend Rate per cent.	6	6	6

LLOYDS BANK, LIMITED.

Head Office: 71, LOMBARD STREET, LONDON, E. C. 3.

Lloyds Bank, Ld., is the only Bank among the Big Five of London to operate in India through direct branches. Amongst British Banks, Lloyds Bank is the second largest in England (apart from the Bank of England). It has 1,900 offices in England and Wales. The strength, influence, resources, connections and branches which Lloyds Bank has in Britain are the result of a series of fusions or amalgamations of a number of banking institutions. While the activity at home was thus broadened and strengthened, Lloyds Bank, has, at the same time, taken steps to develop its business in overseas centres. Through its affiliates, it has many branches in France, in centres like Brussels, Antwerp and Geneva, in Italy, South America, West Africa, New Zealand, Egypt, India and Burma. The Indian business (which was acquired through the purchase of Cox & Co.) is controlled by a special Eastern Department of the Bank in London. The balance sheet as at 31st December 1933 reveals a decrease in deposits of £17 millions, from the previous year. On the assets side, cash has decreased by £2.3 million. Investments have increased by £14 million while Loans and Advances have decreased by £8.6 million. The Bank's holding of Government securities was written down in 1931 by a sum of £2½ million transferred from the public reserves, of this £500,000 has been re-transferred to the Reserve Fund, the balance being retained as investment reserve. Profits at £1.4 million was £112,000 less than in the preceding year. The dividend on "A" shares was 12 per cent. and on "B" shares 5 per cent. It is reported that the "secret" reserves of the bank are maintained in "abundant strength."

(In Sterling—000's omitted)

	1931.	1932.	1933.
Liabilities—			
Capital ...	15,810	15,810	15,810
Reserves ...	7,500	8,000	8,000
Total of Capital and Reserves ...	23,310	23,810	23,810
Deposits ...	333,735	382,103	364,554
Acceptances, Endorsements, Guarantees, etc. ...	36,141	31,979	42,641
Assets—			
Cash	73,323	80,064	77,751
Invest	51,327	85,359	99,391
Bills of Exchange ...	42,587	76,788	56,887
Loans and Advances	167,518	141,196	132,623
Property, Acceptance Cover, etc. ...	54,366	50,914	50,471
Shares in Allied Banks ...	5,332	4,733	5,090
Percentage of Total Capital and Reserves to Deposits	7.0	6.2	6.5
Percentage of Cash to Deposits ...	22.0	20.9	21.3
Profit and Loss Items—			
Brought forward ...	511	522	515
Profit ...	1,927	1,551	1,439
Dividend distribution	1,516	1,358	1,348
Allocation to Funds	400	200	100
Carried forward ...	522	515	506
Dividend Rate per cent.	a12 b 5	a12 b 5	a12 b 5

a=on "A" Shares
b=on "B" Shares

THE MERCANTILE BANK OF INDIA, LTD.

The Mercantile Bank of India was registered in 1892 ; and it has had long and influential connections in India. In addition, the Bank has branches and agencies in Ceylon, Malaya, China, Siam and Mauritius. As with other Eastern exchange banks, the loss on Government securities necessitated special measures, for which the Bank transferred in 1931, £450,000 from the Reserve Fund to inner reserves. Considering that during the year 1932, giltedge securities both in India and London showed remarkable recovery, the inner reserves are now in an exceptionally strong position owing to the release of the funds set apart for the 1931-end shrinkage in giltedge values which have not been transferred back to the Reserve Fund. Even after the transfer of £450,000 from the Reserve Fund, the latter stood on 1st January, 1931, at a figure which was exactly equivalent to the paid up capital, namely, £1,050,000. The Directors have transferred a sum of £25,000 during 1932, from profits to Reserve Fund, thus strengthening it further. It was the cautious policy of the directors in better years which made the financial position of the Mercantile Bank unassailable by the extreme depression of the past three years.

(In Sterling—000's omitted.)

	1931.	1932.	1933.
Liabilities—			
Capital	1,050	1,050	1,050
Reserves ...	1,050	1,075	1,075
Total of Capital and Reserves ...	2,100	2,125	2,125
Notes in circulation ...	175	162	104
Deposits ...	11,220	13,035	12,248
Acceptances, Bills payable, etc. ...	952	655	542

Assets—			
Cash	1,458	2,142	1,958
Investments ...	5,774	6,201	6,006
Bills receivable ...	1,354	2,091	1,727
Loans and Advances ...	5,325	5,002	4,633
Property, Acceptance cover, etc. ...	757	557	657
Percentage of total Capital and Reserve to Deposits ...	18.7	16.3	17.3
Percentage of Cash to Deposits	13.0	16.4	16.0

(In Sterling—000's omitted.)

	1931.	1932.	1933.
Profit and Loss Items—			
Brought forward ...	167	168	172
Profits	152	180	162
Dividend distribution	126	126	126
Allocation to Funds ...	25	25	35
Carried forward ...	168	172	172
Dividend Rate per cent.	12	12	12

THE NATIONAL BANK OF INDIA, LTD.

The National Bank of India Limited, was originally founded in Calcutta as a Rupee company in 1863 but was soon after registered in England and converted into a sterling company. Its principal sphere of activity is in India but it has important business in East Africa, Kenya and Uganda. The accounts for the year ended 31st December, 1933 show a decrease in deposits of about £477,000. Loans and Advances have increased by £197,000 and cash by £82,000. Investments of the bank in giltedge securities were written down to their market value by the transfer of £800,000 from the Reserve Fund in 1931, which has not been put back even after the appreciation in giltedge securities. The balance sheet shows a very liquid position, the total cash securities and Bills of Exchange amounting to £23,600 thousands against the deposit liability of £29,636 thousands. The dividend for the year 1933 is 20 per cent. less tax which is the same as in the previous two years. Before that the dividend used to be 20 per cent. free of tax.

(In Sterling—000's omitted.)

	1931.	1932.	1933.
Liabilities—			
Capital	2,000	2,000	2,000
Reserves ...	2,200	2,200	2,200
Total of Capital and Reserves ...	4,200	4,200	4,200
Deposits ...	27,804	30,113	29,636
Acceptances, Bills payable, etc. ...	2,711	1,044	1,044
Assets—			
Cash	3,819	4,591	4,673
Investment ...	2,956	13,821	15,374
Bills of Exchange ...	5,632	5,897	3,553
Loans and Advances	2,013	10,609	10,806
Property, Acceptance cover, etc. ...	843	967	1,073
Percentage of Total Capital and Reserves to deposits ...	15.1	13.9	14.2
Percentage of Cash to Deposits ...	13.7	15.2	15.8
Profit and Loss Items—			
Brought forward ...	279	279	249
Profits	470	450	451
Dividend distribution	400	400	400
Allocation to Fund ...	70	80	50
Carried forward ...	279	249	250
Dividend Rate per cent.	20.0	20	20

NATIONAL PROVINCIAL BANK, LTD.

Head Office: 15, BISHOPSGATE, LONDON E.C. 2.

(*Represented in India by Messrs. Grindley & Co., Ltd.*)

(000's *omitted.*)

	1932. £	1933. £
Liabilities—		
Capital	9,479	9,479
Reserve Fund	8,000	8,000
Current Deposit and other accounts	291,567	288,240
Acceptances	6,206	6,395
Due to Subsidiary Co.'s ...	256	158
Undivided Profits ...	775	857
Total ...	316,283	313,129
Assets—		
Cash, notes, balances and cheques	39,884	43,001
Money at call and notice ...	17,690	18,168
Investments	64,132	78,214
Bills Discounted	58,928	48,167
Advances	122,232	111,817
Bank Premises	7,211	7,367
Acceptances	6,206	6,395
Total	316,283	313,129

THE P. & O. BANKING CORPORATION, LTD.

Head Office: 117-122, LEADENHALL STREET, LONDON, E. C. 3.

The P. & O. Banking Corporation was founded in 1920 and among the original allotees of shares in this Bank were the Westminster Bank, Lloyds Bank, the National Provincial Bank and the P. & O. Steam Navigation Co. The bank's progress

has not been as spectacular as was anticipated at the time of inception, owing largely to the severe post-War slump and unsettled conditions in the East. In spite of these difficulties, the Bank has been able to secure for itself an important position among the Eastern Exchange banks. Towards the end of 1920, the Bank acquired practically all the ordinary capital of the Allahabad Bank, Limited, and through it, controls a prosperous inland banking business. In 1927, however, the P. & O. Bank, in its turn, was affiliated to the Chartered Bank of India, Australia and China. The deposits of the bank which during the three years previous to 1932 remained steady at about £8 million have come down to about £6.4 million. The bank's holdings of securities have increased by reason of the narrowing down of the outlets for the employment of its funds, and at £6,218,406 stand some £823,000 higher than in the previous year. Over 83 per cent. of these investments are of short date. Profits have increased by £5,000 over the previous year. The dividend is 5 per cent., leaving £52,000 to be carried forward.

(In Sterling--000's omitted.)

	1931.	1932.	1933.
Liabilities—			
Capital	2,594	2,594	2,594
Reserves	180	180	180
Total of Capital and Reserves	2,774	2,774	2,774
Deposits	7,713	6,898	6,433
Acceptances, Bills payable, etc. ...	8,065	4,576	5,594
Assets—			
Cash	727	2,375	1,958
Investments ...	4,444	3,757	6,218
Bills receivable ...	3,405	2,102	2,134
Loans and Advances ...	8,883	4,824	3,521
Property, Acceptance cover, etc. ...	638	592	539
Shares in Allied Banks, etc.	590	590	590
Percentage of Total Capital and Reserves to Deposits ...	36.0	40.2	43.1
Percentage of Cash to Deposits	9.4	34.4	30.4
Profit and Loss Items—			
Brought forward ...	26	32	45
Profits	108	107	112
Dividend distribution	103	101	105
Allocation to funds ...	...	...	...
Carried forward ...	32	38	52
Dividend Rate per cent.	5	5	5

Note:—Year ends 31st March.

THOS. COOK & SON (Bankers), LTD.

Thos. Cook & Son (Bankers), Ltd., was formed a few years ago to take over the banking business from the travel organization of Thos. Cook and Son. The balance-sheet as at 31st October, 1933 shows that the high degree of liquidity which has been a marked characteristic of its accounts in the past is fully maintained.

(In £000's omitted)

	1932.	1933.
Liabilities—		
Capital	125	125
Reserve Fund	125	125
Current Deposits and other accounts	2,974	2,905
Liability to customers on account of engagements, etc., as per contra ...	22	15
Total	3,246	3,266
Assets—		
Cash in hand and balances with bankers ...	1,489	1 807
Currencies in hand ...	26	26
Remittances in transit ...	290	130
Money at call and short notice	295	185
Bills discounted	332	341
Investments (at below market value, depreciation having been provided out of the year's profits) ...	519	494
Advances to customers and other accounts ...	217	148
Bank premises and furniture, at cost *less* amounts written off	61	59
Liability of customers for engagements, etc., as per contra	17	
Total	3,246	

Foreign Banks:

THE AMERICAN EXPRESS CO., INC.

Home Office: New York.

The American Express Company, Inc., and the companies with which it is affiliated, offer an international service in three closely related fields—financial, shipping, and travel. This service is available at offices in the principal commercial and tourist centers of the globe and through approximately ten thousand banking, travel and shipping correspondents.

(In Dollars—000's omitted).

	1931.	1932.	1933.
Liabilities—			
Capital	6,000	6,000	6,000
Reserves and Undivided Profits ...	3,290	3,586	4,083
Deposits	15,437	13,396	16,845
Acceptances ...	1,472	1,141	2,963
Other liabilities ...	3,174	3,156	4,723
Assets—			
Cash	16,459	15,995	14,338
Giltedge Investments	1,706	686	1,681
Loans and Advances ...	6,688	5,311	5,652
Acceptances ...	1,472	1,141	891
Property and other assets ...	3,048	4,146	12,052

THE CHASE NATIONAL BANK OF THE CITY OF NEW YORK.

(In Dollars. 000 omitted.)

	1932. $	1933. $
Liabilities—		
Capital	148,000	148,000
Surplus	100,000	50,000
Undivided profits ...	11,130	9,138
Reserve for taxes, interest, contingencies etc.	15,937	4,115
Dividend payable Jan. 1	3,700	2,599
Deposits	1,466,039	1,338,699
Circulating notes ...	...	18,120
Acceptances; less amount in portfolio	89,507	99,716
Liability as endorser on acceptances and foreign bills ...	1,218	389
Other liabilities ...	20,759	44,370
Total	1,856,290	1,715,188
Assets—		
Cash and due from banks	391,297	304,791
United States Government securities ...	214,997	207,064
Short term municipal securities maturing within two years ...	75,213	40,060
Other State and Municipal securities ...	7,813	50,089
Other short-term securities maturing within two years ...	41,093	51,885
Federal Reserve Bank stock	8,160	8,160
Other bonds and securities	99,427	97,314
Loans and discounts ...	887,187	795,192
Real estate ...	32,716	42,672
Redemption Fund—United States Treasurer	...	1,250
Customers' acceptance liability, less amount in portfolio ...	85,812	94,506
Other assets ...	12,575	22,204
Total	1,856,290	1,715,188

THE HONGKONG AND SHANGHAI BANKING CORPORATION.

Head Office : HONGKONG.

The Hongkong and Shanghai Banking Corporation owes its existence to a special ordinance of the Legislative Council of Hongkong in 1867. The Bank has a particularly strong reserve position, there being a sterling reserve of £6.5 million. In these calculations, sterling exchange has been taken at 1sh. 5⅜d. during 1933. Adopting the same exchange rate, deposits amount to the substantial figure of 63.3 million. The notes in circulation are £10.6 million. Against these the Bank has, in cash and bullion, £27.8 million. Giltedge securities amount to £16.6 million. It will thus be seen that the Bank has not only a tremendous reserve position but a substantial liquid position. That a bank of this size and with these resources should have felt the effects of the economic blizzard is somewhat surprising—but not so surprising if it is remembered that a large part of the operations of the Bank are done in China which has had its political troubles and currency fluctuations. In spite of the difficult conditions in which the Bank has had to carry on its business, it has been able to meet the exceptional losses from current profits, which shows that the earning power of the Bank is as sound as ever.

(In Sterling—000's omitted.)

	1931.	1932.	1933.
Sterling Exchange taken at	1/5¾d.	1/3d.	1/5⅜d.
Liabilities			
Capital	1,438	1,250	1,448
Sterling Reserve ...	6,500	6,500	6,500
Silver Reserve ...	719	625	724
Total of Capital and Reserves ...	8,657	8,375	8,672
Notes in Circulation ...	9,289	8,591	10,608
Deposits ...	55,594	58,227	63,270
Acceptances and Bills Payable ...	1,161	1,134	1,201
Assets—			
Cash ...	15,411	20,842	27,840
British Government, Indian, Colonial and other securities ...	17,554	18,124	16,620
Bills discounted, loans, credits, acceptances, etc.	41,089	36,917	38,779
Bank Premises ...	1,409	1,230	1,351

(In Dollars—000's omitted.)

Profit and Loss Items—			
Brought forward ...	3,429	3,422	3,439
Profits	16,649	16,894	15,207
Dividend distributed	15,894	15,297	13,612
Allocation to funds ...	500	...	...
Carried forward ...	3,422	3,439	3,463
Dividend rate per share	£6	£6	£6

THE NATIONAL CITY BANK OF NEW YORK.

Till three years ago, the National City Bank of New York had the distinction of being the largest Bank in the world alike in regard to capital, reserves and deposits. The first place has now, however, been secured by the Chase National Bank, which, as a result of the latest amalgamation, has now the world record figure for capital, reserves and deposits. It may be said that the National City Bank of New York is, to-day, the second largest Bank in the world. Its paid up capital is $127 million, surplus $30 million and undivided profits $5 million. Deposits aggregate to $1,117 million. Though these figures are lower than the record years of 1929 and 1930, they are yet commensurate with the times and the size of the Bank. The Bank has maintained the largest liquidity. Mr. C. E. Mitchell, Chairman of the Bank, was proud to claim that "the National City Bank of New York, the National City Company and the City Bank Farmers' Trust Company, all forming a single 'National City' organisation, was equipped more completely and efficiently than ever to render a complete commercial and investment and trust service."

(In million dollars.)

	1931.	1932.	1933.
Liabilities—			
Capital	124	124	127
Surplus	90	76	30
Undivided profits ...	12	5	5
Reserves	47	37	8
Liability as acceptor, endorser or maker on acceptances and bills ...	137	74	74
Deposits	1,261	1,299	1,117
Total ...	1,671	1,615	1,387
Assets—			
Cash in vault and in Federal Reserve Bank	179	197	239
Due from banks and bankers ...	144	103	125
Loans, discounts and bankers' acceptances ...	792	620	497
United States Government Bonds and Certificates ...	208	365	229
State and Municipal Bonds	19	53	66
Stock in Federal Reserve Bank	7	7	7
Other Bonds and Securities	105	120	65
Ownership of International Banking Corporation ...	8	8	8
Bank Buildings ...	61	60	57
Items in transit with branches	23	10	20
Customers' liability account of acceptances ...	119	66	69
Other assets	7	6	5
Total	1,671	1,615	1,387

NETHERLANDS INDIA COMMERCIAL BANK, N. V.

The Netherlands India Commercial Bank N. V. was established at Amsterdam in 1863. Through its extensive organization the Bank is able to offer accommodation for every description of banking business in Holland and its colonies, and also in many important ports in British India, China and Japan.

(In Guilders 000's omitted.)

	1932.	1933.
Liabilities—		
Capital	55,000	55,000
Reserves	25,691	26,692
Total of Capital and Reserve	80,691	81,692
Current, Deposit & other Accounts ...	1,00,418	90,303
Acceptances & Bills Payable	10,587	9,836
Assets—		
Cash and Money at Call ...	33,182	26,208
Treasury Bills ...	13,100	20,791
Investments and Syndicates	29,570	30,274
Loans and Advances ...	64,542	63,457
Bullion and Bills Receivable	40,125	27,301
Properties	4,376	4,011
Percentage of Capital and Reserves to total deposits	80.3	90.5
Percentage of Cash to total deposits	33.0	29.2

NETHERLANDS TRADING SOCIETY.

AMSTERDAM.

(In Sterling 000's omitted; Converted at Fl. 7.5 £1

	1931.	1932.	1933.
Liabilities—			
Capital ...	10,671	10,671	10,671
Reserves ...	2,669	2,669	2,669
Total of Capital and Reserves ...	13,340	13,340	13,340
Deposits ...	46,264	40,169	32,877
Bills Payable ...	3,071	1,639	[illegible]
Sundry Creditors ...	5,152	3,837	[illegible]
Assets—			
Cash ...	9,790	11,675	10,805
Investments ...	12,405	12,424	10,898
Bills Receivable ...	13,810	14,415	10,290
Loans and Advances	26,441	15,414	14,413
Properties ...	3,693	3,789	3,446
Sundry Debtors ...	2,301	1,878	638
Percentage of total Capital and Reserves to Deposits	28.8%	33.2%	40.6%
Percentage of Cash to Deposits ...	21.2%	29.1%	32.9%

THE YOKOHAMA SPECIE BANK, LTD.

Head Office: YOKOHAMA.

The Reports and Accounts of the Yokohama Specie Bank are published for half-yearly periods, January to June and July to December.

Below are given details of the Balance Sheets as at December 31, 1932 and 1933, and the Summary of Profit and Loss Accounts for the half-years ended December 31, 1932 and 1933. After making due provisions for all bad and doubtful debts, rebate on bills, etc., the net profit for the half-year ended December 31, 1933 was Yen 14,148,164 inclusive of Yen 6,869,038, being the carry forward from the last account. From the above profits, Yen 1,500,000 was added to the reserve fund, a dividend at the rate of 10 per cent. per annum was paid, the total amount required for the purpose being Yen 5,000,000. The carry forward to the next account is Yen 7,648,164.

(In thousand Yen)

Liabilities—	Dec. 31, 1932.	Dec. 31, 1933.
Capital issued and fully paid	100,000	100,000
Reserve Fund	118,450	121,250
Reserve for doubtful debts	3,810	3,602
Notes in circulation ...	6,598	4,265
Deposits (current, fixed, etc.)	680,157	600,507
Bills payable, bills rediscounted, acceptances and other sums due by the bank	552,990	694,201
Dividends unclaimed ...	9	6
Balance of profit and loss brought forward from last account ...	5,077	6,869
Net profit for the last half-year	7,082	7,279
Total ...	1,474,173	1,537,979

Assets—		
Cash account—		
In hand	36,822	40,028
At bankers	97,583	54,142
Investments in public securities and debentures at current market price	451,042	460,364
Bills discounted, loans, advances etc. ...	394,925	465,037
Bills receivable and other sums due to the bank	470,557	494,465
Bullion and foreign money	686	1,837
Bank's premises, properties, furniture etc., estimated at cost price, less allowance for depreciation	22,558	22,106
Total ...	1,474,173	1,537,979

Profit and Loss Account—		
Reserve fund ...	1,300	1,500
Dividend—		
Yen 5.00 per share for 1,000,000 shares ...	5,000	5,000
Balance carried forward to next account ...	5,859	7,648
Total ...	12,159	14,148
Balance brought forward from previous balance sheet	5,077	6,869
Net profit for the half-year (after making provision for bad and doubtful debts, rebate on bills etc.)	7,082	7,279
Total	12,159	14,148

INSURANCE SECTION:

LIFE INSURANCE

The growth of Indian Insurance business has been rather uneven. While the importance of Life Insurance has been recognised since the middle of the 19th Century, it was not until after the War that companies were established in India to transact fire, marine, and other general insurance. The earliest life office to be established in India was the Madras Equitable, which was founded in 1829, but this company ceased operation soon after the War. The Oriental of Bombay is the oldest Joint Stock Company organised to transact Life business. It was established in 1874 and has been uniformly successful since its inception. Several other companies have been subsequently organised and have achieved a large measure of success; but it was only after the year 1920 that the Indian Companies entered upon an era of spectacular progress. The usual test of the progress of life insurance companies is the total volume of business transacted every year and the following table shows the extent of new business secured by Indian companies and the volume of business outstanding at the end of each year:

Year.		New Business written during the year	Total Business remaining in force at year-end
1920	...	5,17 lakhs	31 crores
1921	...	5,47 ,,	34 ,,
1922	...	5,64 ,,	37 ,,
1923	...	5,85 ,,	39 ,,
1924	...	6,89 ,,	42 ,,
1925	...	8,15 ,,	47
1926	...	10,35 ,,	53
1927	...	12,77 ,,	60
1928	...	15,41 ,,	71
1929	...	17,29 ,,	82
1930	...	16,50 ,,	89
1931	...	17,75 ,,	98

The figures for 1932 and 1933, are not yet available in collective form, but an examination of the Balance Sheets reveals that the business of the more important companies has shown an increase in 1933 over that of 1932.

Non-Indian companies also transact life insurance business in India and many of them had been established in India long before any Indian companies were organised. In recent years, however, the ratio of business secured by them has shown a progressive tendency to decline.

In addition to the insurance companies which are subject to the provisions of the Indian Life Insurance Companies' Act of 1912 and the amending Act of 1928, the Post Office carries on life assurance business for the benefit of the Government servants. Statistics of the Postal Insurance Fund are given hereunder.

	New Business effected during the year		Total business remaining in force at yeat-end.			
Year nding	No. pol	Tot un as d	No. c pol cies.	Total sums assured & business	tal ncome	ance Fund t year-end
	(In thousands of Rs.)					
1929	7,582	1,43,41	64,474	13,02,47	63,17	3,64,44
1930	8,894	1,49,56	71,479	14,17,81	69,36	4,02,80
1931	9,710	1,50,38	79,058	15,32,85	76,05	4,46,46
1932	6,484	98,15	83,165	15,88,89	81,39	4,91,47

According to a statement published by the United States Department of Commerce, the amount of life assurance in force per capita in various countries was as under, at the end of 1929:—

Country		Per Capita (In $)	Per Capita (In Rs.) at par of exchange
U.S.A. ...	...	843	2,318.2
Canada ...	...	640	1,760.0
New Zealand	...	358	984.5
Australia ...	...	273	750.7
United Kingdom	...	266	731.5
Sweden ...	...	205	563.7
Italy ...	...	152	418.0
Norway ...	...	137	376.7
Netherlands	...	123	338.2
India ...	...	2	5.5

The total assets of Indian companies at the end of 1931, amounted to Rs. 29 crores and these were invested to the extent of 71½ per cent. in stock exchange securities.

Loans on the surrender value of policies and mortgages absorbed about 14 cent. of the funds. During the last two or three years, for which, however, no collective statistics are available, there has been a growing tendency to invest a larger percentage of life funds in the sterling securities of the Government of India.

The total assets in India of non-Indian companies at the end of 1931, amounted to Rs. 37 3/5 crores, the bulk of which amount —nearly Rs. 32 crores—represents the Indian assets of companies incorporated in the United Kingdom, and nearly 5½ crores those of companies constituted in the Dominions and Colonies. The Indian assets of American Companies amount to 2¾ lakhs, those of Continental Companies to nearly 5 lakhs, of the Japanese to 6½ lakhs, and of the Javanese to a little over 1/3 lakh. Out of this 37 crores, 33¾ crores represent Indian Assets of Companies, which carry on life business in India, either solely or along with other Insurance business.

In the matter of their investment policy it is gratifying to note that a more scientific policy is dawning upon the minds of Insurance Companies established in India. Formerly, there was hardly any company which adopted an active and rational investment policy. The general tendency was to purchase giltedge securities as and when funds accumulated and lock them away. Seldom was advantage taken of the disparity in yields of securities of different maturities with a view to increase the average rate of interest on investments and bring down the book value of securities. An active policy of the character indicated would not altogether relieve life insurance companies of the necessity of having to provide against depreciation of investments in abnormal times. But it would certainly mitigate the severity of this influence. The leading British offices are known to adopt this policy with beneficial results on the yield of their investments.

NEW BUSINESS FIGURES

INDIAN INSURANCE COMPANIES

(In thousands of Rs.)

Name of Company	Year ending	1931	1932	1933
Oriental	31st Dec.	5,35,61	5,94,01	7,04,26
Hindustan	30th Apr.	1,42,39	2,01,07	2,53,21
National	31st Dec.	1,32,31	1,55,74	1,67,15
Empire	28th Feb.	1,05,27	1,11,56	1,38,24
New India	31st Mar.	71,04	88,37	1,11,67
Bharat	31st Dec.	79,09	...	...
Lakshmi	30th Apr.	55,19	70,89	1,00,00 (a)
Bombay Mutual	31st Dec.	69,57	75,65	1,29,17
Bombay Life	31st Dec.	59,66	63,46	94,17
Industrial and Prudential	31st Dec.	50,41	52,00	67,00
United India	31st Dec.	42,94	49,66	66,41
Asian	31st Dec.	40,17	32,63	45,31
Metropolitan	31st Dec.	39,85	40,00 (a)	45,00
General Assurance	31st Dec.	31,67	35,22	47,76
Western India	31st Dec.	31,53	37,13	37,49
Zenith	31st Dec.	21,50	20,82	27,65
East and West	31st Dec.	18,56	20,82	30,54
Great India	31st Dec.	17,18	16,50	...
Jupiter General	30th June	15,08	15,07	14,05
Unique	31st May	14,06	...	...
Asiatic Govt. Security	31st Dec.	8,59	10,18	12,00

(a) The actual amount is over this figure.

INSURANCE SECTION:

FIRE AND MARINE INSURANCE

The Fire and Marine Insurance market in India till the close of the war, was dominated by the companies registered outside India. It is true that the Triton Insurance Company was founded in Calcutta with a rupee capital as long ago as 1850 and the Indian Mercantile Insurance Co., was started in Bombay in 1907 and both have been quite successful in their respective cities. But it was not till 1919 that Indian Companies were organised with a view to develop a distinctively national insurance market outside the sphere of life assurance.

The following table gives the names of the Indian general insurance offices with their paid up capital, date and place of registration.

Name of Companies.	Date of registration	Place of registration	Capital Paid up
New India Assurance	1919	Bombay	71,21,000
Jupiter General Insurance ...	1919	Bombay	23,75,000
Vulcan Insurance ...	1919	Bombay	15,99,000
Triton Insurance ...	1850	Calcutta	5,75,000
Universal Fire and General Insurance ...	1919	Bombay	6,35,000
British India General	1919	Bombay	10,00,000
Indian Mercantile Insurance ...	1907	Bombay	4,23,000
Hukumchand Insurance ...	1929	Calcutta	10,00,000
Crescent Insurance ...	1919	Bombay	1,47,000
Burma Fire and Marine Insurance ...	1919	Rangoon	15,00,000
Clive Insurance Co. ...	1917	Calcutta	......
General Assurance Trust ...	1928	Bombay	......
Indian Globe Insurance Company ...	1930	Bombay	......
National Fire & General ...	1931	Calcutta	......
		Total	1,63,75,000

With the exception of the Burma Fire and Marine Insurance Company, Limited, which was floated in Rangoon in 1919 and the Hukumchand Insurance Company, and National Fire and General which were incorporated as late as 1929 in Calcutta, all the other newly established offices have their head-quarters in Bombay. The Burma Fire and Marine Insurance Company, after a successful career of 12 years, was wound up voluntarily in the year 1931. The Crescent Insurance Company, although originally incorporated with the object of transacting all classes of business, has latterly confined itself more or less to life assurance business. There are a few other companies with comparatively small paid up capital transacting miscellaneous business, such as motor car and employers' liability insurance.

The aggregate net premium income of all these companies from business underwritten in India in 1931 amounted to only Rs. 60 lakhs against a net total premium income of both Indian and non-Indian companies of Rs. 250 lakhs. The New India the Jupiter, the Vulcan The Triton and the Universal have also important business connections outside India and derived a net premium income of Rs. 100 lakhs in 1931 from their operations in the foreign field The total premium income inclusive of foreign revenue, was Rs. 160 lakhs. During 1932 and 1933, though no official figures are available as yet, the amount of business done by Indian Companies in common with that done by European Companies has shrunk considerably, for which the acute world-wide depression is chiefly responsible. The amount of business which Indian Companies have so far been able to under-write in a year is small in comparison with their capitalisation. A much larger business can be handled by them with the resources in their command.

The distribution of premium income among the non-Indian companies during 1930, is shown by the following table:—

Country of Incorporation	No. of Companies included	Fire	Marine	Miscellaneous	Total
Great Britain ...	60	72	14	48	1,34
Dominions & Colonies	19	13	18	5	36
United States ...	10	9	2	...	11
Continent of Europe ...	15	4	1	..	5
Others	14	2	1	...	3
Total ...	118	100	36	53	1,89

Statistics are not available in respect of the gross premium income derived from all classes of insurance business and the figures given in the official Insurance Year-Book are net figures after deduction of re-insurance premia. The total premium income of Rs. 258 lakhs for the year 1931 is composed of Rs. 128 lakhs from fire, Rs. 43 lakhs from marine, and Rs. 77 lakhs from miscellaneous insurance.

Under the Insurance Companies act of 1928, companies transacting business in India are obliged to furnish the Government with statistics of only the net premium income derived from India for which credit is taken in the accounts. This is not a satisfactory state of affairs. The time has come when the Government should sonsider the desirability of amending the said Act, making it obligatory on Insurance companies to disclose their gross premium and net income on their Indian business.

The Official publications giving the revenue for 1932 and 1933, are not available now. But from the balance sheets already to hand, of the principal offices, it is possible to form some idea of the trend of business during those two years. In the fire branch owing to shrinkage of values and lower stocks carried by industries, a general contraction of premium income was bound to be felt. The following figures give the net premium income from fire business of the New India, The Jupiter, and The Triton for the four years 1930, 1931, 1932 and 1933.

(In lakhs of Rupees).

	1930	1931	1932	1933
New India	47.15	47.99	42.05	...
Jupiter General	...	10.19	12.54	...
Triton	8.69	6.91	6.52	6.57

It may be seen from the above figures that the business has fallen considerably in 1932 and 1933. But the special forces that have prevailed during the last two years would have had their full effect realised by the British offices operating in India. Indian Offices transacting business abroad report a substantial decrease in premiums from business done abroad, but the fall has been compensated by the accretion of a larger proportion of home business. The fire loss experience shows a slight improvement, and underwriting reserves have been in certain cases further strengthened.

In the Marine Insurance branch, the small proportion of business that India had, has been further reduced by the unsettled conditions in the market. The scramble for business has necessitated the cutting of rates to ridiculously low levels, leaving little margin of profit. The only factor that tended to support the market, oddly enough, was the heavy export of gold from Bombay, which has been steadily maintaining a demand for insurance cover. It would seem however, that the bulk of this business has been handled by British Offices.

Conditions in the marine insurance market in England were no better. Owing to the insular feelings aroused by the severity of the trade slump, countries have raised tariff walls as high as the skies, blocking international trade. Consequently British exports have declined and the request for marine insurance has correspondingly decreased. However some of the British companies have done better in 1932, than in 1931. This increase is not wholly to be welcomed as it increases the commitments of the companies. In some cases an increase is to be explained by altered basis of converting foreign business or the fact that there was lesser proportion re-insured in 1932 than in 1931. But the reserves of most companies are quite substantial and therefore, there is no fear of the companies not being able to meet their commitments.

INSURANCE SECTION:

REVIEWS OF BALANCE SHEETS

INDIAN INSURANCE COMPANIES

THE ASIAN ASSURANCE CO., LTD.

(Established—1910.)

Head Office:—BOMBAY.

Since the Asian Assurance Company came to receive the co-operation as Chairman of Mr. Jamnadas Mehta and since Mr. Fozdar has been its Manager, this Company has made remarkable progress as will be shown by the following table:

	1931	1932	1933
Number of proposals ...	3,402	2,724	3,877
Number of policies issued	2,574	2,066	2,820
Face value of proposals ...	65,01,[illegible]10	46,18,700	62,13,060
Amount assured	40,17,[illegible]00	22,63,125	46,30,575
Total premium income ...	7,4[illegible]	7,88,587	9,20,151
Total business in force ...	1,38,[illegible]9,028	1,48,40,801	1,80,11,330
Life Fund	20,80,069	24,50,235	28,66,044

In 1933, the Company underwrote new business of Rs. 45 lakhs which is the highest recorded amount in the history of the company and at the end of the year the life fund stood at Rs. 28.7 lakhs. Against total assets of Rs. 34.11 lakhs, the Asian has invested Rs. 13 lakhs in giltedge and bonds; Rs. 2.66 lakhs in mortgages on property; Rs. 4.69 lakhs in Loans on policies; Rs. 1.14 lakhs in secured loans and Rs. 6.18 lakhs on buildings. On the whole the investments of the Company are well distributed and carefully selected. The only remark that one may make is that the building, situated in Ballard Bier, Bombay, on which they have spent a considerable sum is a somewhat unfortunate investment as the land rent payable to the Port Trust is very high and as, owing to trade depression, letting out offices is extremely difficult in Bombay. The Directors have, therefore, wisely started a sinking fund for the company's building; the sinking fund stands now at Rs. 66,337. It is expected that this sum accumulating at 6 per cent. compound interest will, in the course of 48 years, amount to the full cost of the building. There are still 86 years to run in respect of the lease from the Port Trust.

Life Account.

(In thousands of Rs.)

	1931.	1932.	1933.
New Business—			
Number ...	2,574	2,066	2,820
Amount ...	40,17	32,53	45,30
Premiums on New Business ...	2,18	1,74	2,11
Total Premiums	7,44	7,89	9,20
Claims ...	1,72	2,52	2,14
Expenses ...	3,02	2,85	3,53
Life fund at the beginning of the year ...	18,11	20,80	24,50
Life fund at the end of the year	20,80	24,50	28,66
Ratio of expenses to premium ...	41%	36.1%	38.4%

Balance Sheet.

	1931.	1932.	1933.
Liabilities			
Capital ..	2,04	2,04	2,04
Life fund ...	20,80	24,50	28,66
Reserve funds ...	60	20	72
Other items ...	6,48	3,01	2,69
Total ...	29,92	29,75	34,11
Assets—			
Giltedge securities	10,75	6,83	10,86
Bonds and Preference shares ...	4,35	3,70	2,00
Loans on life policies. ...	3,75	4,36	4,69
Other loans and Mortgages ...	2,67	4,23	7,90
House Property ...	6,18	6,18	6,18
Other items ..	2,22	1,45	2,48
Total ...	29,92	29,75	34,11

THE ASIATIC GOVERNMENT SECURITY LIFE ASSURANCE CO., LTD.

(Established 1913—Life Dept. 1922.)

Head Office: BANGALORE.

The Asiatic of Bangalore was incorporated under the Mysore State Companies Regulations and is one of the pioneers of Insurance business in that State. It is a progressive company with a neat and natty financial position. The accounts of the company are

presented in a clear and lucid way, so that any lay man can interpret them. The results for the year ended December 31, 1933 show an all-round improvement on those of 1932. New policies numbering 1,034 were issued, assuring a total sum of Rs. 12.0 lakhs, as against 773 policies assuring Rs. 10.18 lakhs in 1932. The total premium income was Rs. 2.02 lakhs. The Life Fund at the end of 1933 was 5.32 lakhs showing an increase of Rs. 1,25 thousands over the previous year. The ratio of expenses to premium income at 40.6 per cent. has been considerably reduced from 48 per cent. in the previous year and 52 per cent., in 1931. The Directorate includes some of the most influential gentlemen in the State. The Chairman of the Board is Dr. F. H. Noronha, and the management is in the capable hands of Mr. V. Rangaswami. A sub-office of the company has been opened at 137, Canning Street, Calcutta.

(In thousands of Rs.)

New Business—	1931.	1932.	1933.
Policies ...	601	773	1,034
Sum Assured ...	8,59	10,18	12,00
Premiums ...	1,64	1,75	2,02
Claims	23	33	82
Expenses (management)	85	84	82
Life Assurance Fund at the beginning of the year ...	3,07	3,51	4,07
Life Assurance Fund at the end of the year	3,51	4,07	5,32
Net increase ...	44	56	1,25
Ratio of expenses to Premium ...	52%	48%	40.6

Balance Sheet.

Liabilities—			
Capital	1,69	1,69	1,69
Life Assurance Fund	3,51	4,07	5,32
Reserves ...	1,05	1,02	48
Outstanding claims	36	22	23
Other items ...	47	50	36
Total ...	7,08	7,50	8,08
Assets—			
Giltedged Securities and bonds ...	3,20	3,12	2,85
Loans on Policies ...	45	49	1,07
Other mortgages and loans	1,30	1,27	76
Fixed Deposits ...	60	1,05	1,20
House Property ...	43	33	24
Cash	51	53	1,06
Other items ...	59	71	99
Total	7,08	7,50	8,08

THE BOMBAY LIFE ASSURANCE CO., LTD.

(Established 1908)

Head Office : 45-47, CHURCHGATE STREET, BOMBAY.

Bombay Life is one of the sound and progressive life offices of India. Established in 1908, it has been gaining strength gradually and to-day it can be included within the first ten of the life offices of India. Its new business has made rapid strides during the last three years and at Rs. 94.17 lakhs during the year under review it is a record for the company, showing an increase of nearly 50 per cent over the figure of last year. The total life assurance in force at the end of the year 1933, amounted to 17,325 policies assuring a sum of Rs. 3,08 lakhs.

The total premium income of the year was Rs. 15.13 lakhs and interest income amounted to Rs. 2.09 lakhs. The life fund of the company has been substantially increased by Rs. 12 lakhs to Rs. 50 lakhs. The expense ratio shows a sharp rise of nearly 6 per cent probably due to the big spurt of the new business. But it is always better for such well established offices like the Bombay Life to devote more attention to the reduction of the expense ratio than to the production of higher and higher record-breaking new business. The balance sheet of the company shows that nearly 63 per cent of the total assets of Rs. 58.84 lakhs is invested in giltedged securities ; house properties account for 12 per cent., policy loans for 9 per cent. and other assets for 16 per cent. Thus the assets are quite sound and solid and are well distributed.

(In thousands of Rs.)

New Business—	1933.
Number of Policies ...	5,119
Amount	94,16
New Premiums	4,04
Total Premiums	15,13
Claims	3,54
Expenses	6,26
Life fund at the beginning of the year	38,40
Life fund at the end of the year ...	50,05
Net increase	11,65
Ratio of expenses to premium ...	41.4%

Balance Sheet.

(In thousands of Rs.)

Liabilities—	1933.
Capital	90
Life Fund	50,05
Reserve Fund	1,80
Outstanding claims	2,98
Other Items	3,11
Total	58,84

Assets—

Giltedge securities	...	...	14,75
Debentures and other shares		...	25,10
Mortgages and Loans	...	...	7,60
Agents' Balances	...	...	85
Cash ...	...	...	1,63
Other items	...	...	8,91
Total	...	...	58,84

THE BOMBAY MUTUAL LIFE ASSURANCE SOCIETY, LIMITED.

(Established 1871).

Head Office:—BOMBAY.

The Bombay Mutual is a sound and virile Indian Mutual Life Office. Its progress has been notable, especially within the last five years. In the matter of new business, the company has made rapid strides ; and in 1933 the business written in the company's books came to no less than Rs. 1,29.17 lakhs. In the last valuation the company declared bonuses of Rs. 25 and 20 per thousand on whole-life and Endowment policies respectively. The expense ratio is still very high for an office of its age and should be brought down considerably.

(In thousands of Rs.)

New Business—	1931.	1932.	1933.
Number	4,173	4,568	8,275
Amount	68,75	75,65	1,29,17
New Premiums	3,67	3,88	5,53
Total „	9,09	10,52	15,93
Claims ...	1,58	2,39	2,64
Expenses and C mission	3,90	4,59	6,85
Life fund at the beginning of the year	12,96	15,99	20,02
Life fund at the end of the year	15,99	20,02	33,51
Net increase	3,03	4,03	13,49
Ratio of Expenses to Premiums	42.9%	43.6%	43.0%

Balance Sheet.

Liabilities—			
Life Fund ...	15,99	20,02	33,51
Reserve Fund ...	...	4,19	...
Outstanding claims	1,14	1,65	2,14
Other items ..	60	1,12	1,80
Total Rs. ...	17,82	26,98	37,45

Assets—			
Giltedge securities	14,00	21,46	22,41
Loans on life policies	1,86	2,15	3,75
Cash	43	64	1,52
Other items ...	1,53	2,73	9,77
Total Rs. ...	17,82	26,98	37,45

EAST AND WEST LIFE INSURANCE CO., LTD.

(Established 1913)

Head Office: BOMBAY.

The East and West Life Insurance Company has been in existence for nearly 22 years ; and during all this period, it has had an up-hill task in securing business against the competition of rival business concerns and in securing such business at an economical rate. This is indicated by the fact that the ratio of expenses to Premium has been increasing and stands at the high figure of 55.1 per cent. The total business during 1933 came to Rs. 30.55 lakhs. The total premium income was Rs. 3.70 lakhs. The life fund increased by Rs. 1.36 lakhs to Rs. 7.64 lakhs. The company has steadily progressed since its inception. But till the life fund reaches at least Rs. 10 lakhs, the management will have to take strenuous steps to develop their organisation and interest the right class of agents.

(In thousands of Rs.)

New Business—	1931.	1932.	1933.
No. of Policies ...	1,076	1,300	1,816
Sum Assured ...	18,34	20,50	30,55
Premiums on new business ...	99	1,15	1,21
Assurances in force ...	48,86	58.54	76,33
Total Premiums ...	2,61	2,96	3,70
Claims by death ...	29	56	62
Claims by maturity ...	15	18	16
Commissions and Expenses ..	1,44	1,68	2,04
Life Fund at beginning of the year ...	4,26	5,03	6,28
Life Fund at year end ...	5,03	6,28	7,64
Increase ...	77	1,25	1,36
Ratio of Expenses to Premiums ...	55.2%	56.8%	55.1%

Balance Sheet.

Liabilities—	1931.	1932.	1933.
Capital ...	99	100	1,00
Life Fund ...	503	628	7,64
Other Reserves ...	50	11	22
Claims outstanding and other liabilities ...	32	49	59
Other items ...	2	5	9
Total Rs. ...	6,86	7,93	9,54

Assets—			
Giltedge ...	2,00	1,40	2,47
Debentures ...	84	23	24
Other shares ...	4	4	1
Loans on policies and otherwise ...	1,86	1,48	1,52
Cash ...	35	45	41
Other items ...	1,77	4,33	4,89
Total Rs. ...	6,86	7,93	9,54

EMPIRE OF INDIA LIFE ASSURANCE CO., LTD.

(Established—1897.)

Head Office—BOMBAY.

The Empire of India Life Assurance Company has the second place amongst Indian life offices in regard to size of its life fund. As regards new business, however, it may come fourth in the list. That this Company does not underwrite more business than it actually does in a year is because of the extreme vigour in the selection of lives and the conservative policy to which the Directors have remained loyal all through. Thus, in the year ending February 28, 1934, the proposals received amounted to Rs. 1,74 lakhs whereas policies issued were only Rs. 1,38 lakhs. Throughout its career, the Empire of India has been less keen about the size of new business than about the quality of business and the price at which it is secured. For this reason, the mortality experience of the Company is most favourable; and the expenses of management are markedly low, the ratio of expenses to premium income in 1933-34 being 22.1 per cent. Likewise, the Company has always pursued a conservative policy in regard to investments. Its investments are more or less confined to giltedge securities and first-grade bonds. As much as 99.5 per cent. of such securities and bonds are in the shape of terminable loans, so that the depreciation provided for in past year by a reserve of Rs. 28 lakhs were in the nature of a strengthening of inner reserves as and when the securities mature. It may be taken for granted that in the case of a company like the Empire of India, all the securities in the portfolio will be kept on right to the date of redemption and that, in the meantime, there could be no occasion whatsoever for the sale of such securities. The Chairman of the Company, Mr. Rustom K. R. Cama, in his speech at the annual meeting said, "In view of the very substantial rise which has taken place (since the presentation of the previous report) in the high class fixed interest bearing securities which the Company holds a valuation as at 28th February last shows that the aggregate market value of our invested funds exceeds by a very substantial margin the value at which the securities appear in our balance sheet without taking into account the investment Reserve Fund of over Rs. 28 lakhs." Nor has the Empire of India been a victim to the prevalent mania to declare high bonuses. In this regard also, the Empire of India has preferred to err on the side of safety. The Empire of India is content to make its appeal to the public on the basis of its extremely low premium rates, honest and safe investment policy, most economical management and strict observance of sound principles of finance and insurance. It is not by hectic canvassing for large business but by consistent and persistent adherence to these principles that the Empire of India has built up its position as the second largest Indian life office, its life fund standing at Rs. 3.82 crores, Investment reserve fund at Rs. 28 lakhs and the total resources at Rs. 4.38 crores. The Managers are Messrs. Allum, Bharucha & Co. The Chief Agents for Bengal, Bihar and Orissa and Assam are Messrs. D. M. Das & Sons, who account for a big slice of the total business.

Life Account.

New Business—

	1931-32.	1932-33.	1933-34.
	(In Thousands of Rupees.)		
Number (actual) ...	6,001	6,157	7,602
Amount ...	1,05,27	1,11,56	1,38,25
Premium on Business ...	5,47	5,62	6,42
Total Premiums ...	48,83	48,91	49,71
Claims by Death	10,36	10,41	9,35
Claims by Maturity	21,00	25,15	28,27
Life Fund at the beginning of the year ...	3,43,75	3,49,90	3,63,16
Life Fund at the end of the year	3,49,90	3,63,16	3,82,26
Ratio of Expenses to Premium ...	21%	21%	22.1%

Balance Sheet.

Liabilities—			
Capital ...	1,29	1,80	3,09
Life Fund ...	3,49,90	3,63,16	3,82,26
Other Reserve Funds ...	30,61	34,53	35,74
Outstanding claims	9,58	12,53	11,82
Other items ...	6,10	6,27	4,61
Total ...	3,97,48	4,18,29	4,37,52
Assets—			
Giltedge Securities	1,65,56	1,59,60	2,10,16
Debentures ...	1,48,36	1,70,28	1,25,17
Loans on Life Policies ...	58,23	64,23	67,33
House Property ...	9,00	9,00	9,06
Other Assets ...	16,33	15,18	25,86
Total ...	3,97,48	4,18,29	4,37,52

THE GENERAL ASSURANCE SOCIETY, LTD.

Head Office: AJMER.

The General Assurance Society of Ajmer has a clean and comfortable position. The business completed in 1933 is 47.8 lakhs.

The increase to the life fund in the year was Rs. 11.2 lakhs. The life fund at the end of the year was Rs. 51.4 lakhs. The total resources of the company come to Rs. 58.29 lakhs, of which giltedge account for Rs. 41.1 lakhs and loans on life policies were Rs. 3.9 lakhs. The Company has the unstinting and single-minded devotion of the General Manager, Mr. Bhargova.

Life Account.

(In Thousands of Rs.)

New Business—	1931.	1932.	1933.
Number of Policies	2,004	2,265	3,005
Amount Assured ...	31,67	35,22	47,76
Premiums on New Business ...	1,65	1,79	2,00
Total Premiums ...	10,63	10,86	11,84
Claims ...	3,03	3,42	3,07
Expenses ...	2,80	2,93	3,67
Life Fund at the beginning of year	28,95	34,37	40,23
Life Fund at year end ...	34,37	40,23	51,42
Ratio of expenses to Premium ...	28.2%	27.5%	31.0%

Balance Sheet.

Liabilities—			
Capital ...	1,33	1,33	1,33
Life Fund ...	34,37	40,23	51,42
Outstanding Liabilities of Life Fund	4,71	2,56	2,49
Other items .	1,67	4,62	3,05
Total ...	42,08	48,74	58,29
Assets—			
Giltedge Securities ...	33,15	34,20	41,06
Other Securities and Debentures ...	1,23	6 14	5,40
Fixed Deposits ...	86	2	14
Loans on Life Policies	2,93	3,30	3,[illegible]1
Lands and Buildings	93	1,20	1,22
Other items ...	2,98	3,88	6,56
Total ...	42,08	48,74	58,29

HINDUSTHAN CO-OPERATIVE INSURANCE SOCIETY, LTD.

(Established--1907).

Head Office: CALCUTTA.

The Hindusthan Co-operative Insurance Society has made a bold bid for the second place in the ranks of Indian insurance companies so far as the underwriting of new business is concerned. This ambition, the Company fulfilled three years ago, and has maintained the record in 1933-34 during which new business underwritten comes to over Rs. 2½ crores. An increase of Rs. .50 lakhs in one year is an achievement of which a company may be proud ; by virtue of such a large inflow of new business, the Society is in the current year, as it was in the last year, the second amongst Indian life offices, the easy first being the Oriental. It is to be hoped that when the full accounts are available, it will be found that the Company has not incurred any increase in its ratio of expenses. Looking over the past three years, it is noteworthy that the expense ratio is roundabout 35 per cent.; but in 1932-33 that is, in a year in which the Company wrote quite a satisfactory volume of business considering the general political unsettlement in the country, the expense ratio slightly increased from 34.6 per cent. to 37.1 per cent. The tremendous increase business leads us to apprehend that the expense ratio might have gone up further, in 1933-34. However, a company like the Hindusthan Co-operative need not at all be anxious to buy its business except on its own terms. By all tokens, its expansion policy will mark its activities in the coming years ; and while the management are certainly justified in aiming high, they should be equally particular about the other aim, namely, not allowing the expense ratio to grow higher. The Company may also be congratulated on the substantial addition to the life fund which it was able to make in 1932-33. The increase in the life fund during the year was Rs. 14.69 lakhs as compared with Rs. 14.38 lakhs and Rs. 12.39 lakhs in the previous two years. So satisfactory an improvement in the amount added to the Life fund may certainly be taken as testimony to a favourable claims experience and strict control of expenditure. The life fund at the end of April, 1933 stood at Rs. 1,33.29 lakhs. It is probable that the life fund as on April 30, 1934 might be roundabout Rs. 1,50 lakhs. The investment policy of the Hindusthan Co-operative calls for special remarks. The Directors have avoided, on the one hand, the rigorous adherence only to gilt-edge investments (which is the policy of a company like the Oriental) and, on the other, injudicious investments and advances (which is the case with, for instance, the Bharat). A scrutiny of the investments of the Hindustran Co-operative shows that gilt-edge and bonds and cash are about 12 per cent. of the life fund ; loans on policies absorb another 12 per cent.; the balance is invested either in house and landed properties or loans on mortgages of properties. It should not be forgotten that properties have gone down considerably in value. When a company has nearly Rs. 90 lakhs either in the shape of properties or loans against properties,

there would have to be constant attention to the fluctuation in property values and to the way these fluctuations affect the securities of the company. The Hindusthan Co-operative is able to devote some attention of this kind, as it has specialised, to a certain extent, in the functions of a house building society. While we have no doubt that great vigilance is being exercised in this regard, we cannot but think that the Company has too small a portfolio of liquid securities ; that it should take steps to add to this class of investments ; and that, in addition, the property holdings or loans against properties should, for some time to come, be avoided. While making this suggestion, we should point out that from the point of view of return on investments, the Company's present policy has been to its benefit. In its campaign of capturing more and more business, the Hindusthan Co-operative has placed before the public interesting and attractive schemes like the Deshbandhu policy and the Silver Jubilee policy. The management of the Company is in the able hands of Mr. N. R. Sarker.

Life Account.

(In thousands of Rs.)

New Business—	1930-31.	1931-32.	1932-33.
Number	6,786	8,790	12,973
Amount	1,15,81	1,42,40	2,01,10
Total Premiums ...	23,54	26,19	31,39
Claims by death ...	4,51	4,47	5,72
Claims by Maturity ...	2,88	3,18	4,84
Expenses ..	8,05	9,06	11,64
Life fund at the beginning of year ...	91,83	1,04,22	1,18,60
Life fund at the end of year ...	1,01,22	1,18,60	1,33,29
Net increase in the life fund ...	12,39	+14,38	14,69
Ratio of expenses to Premium ...	34.2%	34.6%	37.1%

Balance Sheet.

Liabilities—			
Capital ...	4,41	4,38	4,38
Life fund ...	1,04,22	1,18,60	1,33,29
Outstanding claims ...	4,79	5,09	6,21
Reserve funds ...	4,28	4,65	5,05
Other items ...	5,47	3,65	3,56
Total	1,23,17	1,36,37	1,52,50
Assets—			
Gilt-edge securities ...	9,98	9,95	9,88
Debentures ...	2,37	3,37	2,37
Ordinary shares ...	2,72	2,76	2,72
Loans on life policies	11,46	13,57	15,18
Loans on mortgages of real properties ...	47,39	55,32	55,13
House and landed properties ...	25,54	26,18	34,61
Cash ...	2,33	1,54	5,36
Other items ...	21,38	24,68	27,25
Total ...	1,23,17	1,36,37	1,52,50

THE INDIAN GLOBE INSURANCE COMPANY, LTD.

(Established—1929).

Head Office: 28, APOLLO STREET, BOMBAY.

The Indian Globe Insurance Company is just 5 years old and for its age is doing good and sound business. As the company pursues a conservative policy in underwriting business, there is no spectacular rise in the business. The accounts for the year 1933 show marked improvement over the figures of 1932 both in the life branch and the general insurance branch. The total premium income of the company for the year under review amounted to Rs. 3.05 lakhs as against Rs. 2.54 lakhs in the previous year.

In the life department the company issued 321 policies during the year assuring a sum of Rs. 10.20 lakhs as against Rs. 8.51 lakhs in 1932. The total premium received amounted to Rs. 1.07 lakhs. The life fund has been substantially increased by a sum of Rs. 37,000 to Rs. 59,000. The expense ratio has been greatly reduced from 69.5 per cent. in 1932 to 55.1 per cent. in 1933.

The total premiums received in the general branches amounted to Rs. 1.55 lakhs showing an increase of Rs. 20,000 compared with the results of the last year. The reserves are kept at Rs. 56,000 or 36.1 per cent. of the premium income. The funds are being gradually increased and we hope that the company will soon build up a sufficient fund both in the life and the general branches.

Life Account.

(In thousands of Rs.)

New Business	1932.	1933.
No. of policies	2,86	3,21
Amount	8,51	10,20
Premiums on new business ...	50	52
Total premiums ...	69	1,07
Claims	4	12
Expenses	48	59
Life fund at beginning of year	3	21
Life fund at the end of year	21	59
Ratio of expenses to premium	69.5%	55.1%
General Insurance Account—		
Premiums	1,35	1,55
Claims	47	31
Expenses	89	1,09
Reserves	34	56
Ratio of claims to premium	34.8%	20%
Ratio of expenses to premium	65.9%	70.3%
Ratio of reserves to premium	25.2%	36.1%

Balance Sheet.

(In thousands of Rs.)

Liabilities—		
Capital	3,02	3,06
Life fund	21	59
General Insurance fund ...	34	56
Outstanding claims ...	21	12
Other liabilities ...	80	1,13
Total ...	4,58	5,46
Assets—		
Giltedge securities ...	2,45	2,15
Debentures	...	15
Cash	40	41
Other items	1,73	2,75
Total ...	4,58	5,46

THE INDIAN LIFE ASSURANCE CO., LTD.

Head Office: KARACHI.

This Company has now been in existence for 42 years and the financial position of the Company is very satisfactory. Below are given details of the position of the Company according to the report and accounts as at 31st May, 1933. The expenses ratio of the Company is remarkably low at 12.9 per cent.

(In thousands of Rs.)

	1932.	1933.
New Business—		
No. of Policies ...	3,18	5,44
Sum Assured ...	5,90	7,56
Premium income ...	28	36
Total premiums ...	7,06	7,00
Life Fund at the beginning of the year ...	62,43	63,23
Life Fund at the end of the year	63,23	71,39
Net increase	80	8,16
Claims	2,51	3,53
Expenses	95	90
Ratio of expenses to Premium	13%	12.9%

Balance Sheet.

Liabilities—		
Capital	1,45	1,45
Life Assurance Fund ...	63,23	71,39
Shareholders' Reserve Fund	6,83	7,83
Claims outstanding ...	1,48	1,92
Other items	14,28	34,74
Total ...	87,27	1,17,33
Assets—		
Giltedged securities and bonds	74,00	1,04,16
Loans on Policies ...	3,35	3,60
Other Mortgages and Loans	1,44	1,00
Property	6,42	6,41
Cash	31	47
Other items	1,76	1,69
Total ...	87,27	1,17,33

THE INDIAN MERCANTILE INSURANCE CO., LTD.

(Established 1907)

Head Office: 11, BANK STREET, BOMBAY

The Indian Mercantile is one of the few old insurance companies doing general insurance business. The Company transacts fire insurance in a modest scale but on a very sound basis. The life department was opened towards the end of April, 1933, and substantial progress has been made even during the eight months under review. The balance sheet is neat and natty and shows the total assets at Rs. 13.63 lakhs.

The net fire premiums after deduction of reassurance premiums amounted to Rs. 1.11 lakhs and out of this fire losses absorbed Rs. 31,000 or 27.8 per cent. and management and commission expenses took Rs. 60,000 or 54 per cent. The fire fund at the end of the year stands at Rs. 2.25 lakhs or 203 per cent. of the premium income. A sum of Rs. 13,000 has been transferred to the profit and loss account from the fire account.

In the life department 256 proposals amounting to Rs. 6.24 lakhs were received during the 8 months ending December 31, 1933 and of this 208 policies assuring a sum of Rs. 5.01 lakhs were completed. The premiums received during this period amounted to Rs. 21,000. The results are satisfactory when the great competition in the field from old and new companies are considered.

Fire Account.

(In thousands of Rs.)

	1933.
Premiums (Net)	1,11
Claims	31
Expenses	60
Reserves	2,25
Ratio of claims to Premium	27.93%
Ratio of expenses to premium	54.05%
Ratio of reserves to premium	202.7%

Life Account.

(In thousands of Rs.

	1933.
No. of policies	2,08
Amount assured	5,01
Premiums	21
Claims	Nil.
Expenses	21
Life fund at the end of the year	1

Balance Sheet.

	(In thousands of Rs.) 1933.
Liabilities—	
Capital	4,23
Fire Fund	2,25
Life Fund	1
Reserve Funds	5,10
Outstanding liabilities of Life Assurance Fund ...	25
Other liabilities	1,79
Total ...	13,63
Assets—	
Giltedge securities ...	9,00
Property	3,73
Outstanding Premiums and rents	41
Cash	14
Other Assets	35
Total	13,63

JUPITER GENERAL INSURANCE COMPANY, LD.

Head Office:—BOMBAY.

The Jupiter General Insurance Company shares, with the New India, the honour of having led the company boom in Bombay in 1919. By the same token, the Jupiter and the New India are the first Indian-managed concerns started in this country for doing general insurance business. In fact, the inauguration of these two companies was the signal for the starting of a number of other companies with aims and objects to do all kinds of insurance business. The Jupiter was a victim to the general craze prevalent early in the last decade that an Indian general insurance company could make any appreciable progress only if it starts underwriting business in America. Most of the companies started contemporaneously with the Jupiter had a like partiality for American business. Subsequent events have proved that this experience was anything but favourable. The result is that all the companies that entered the American field are now gradually reducing their business in America, with a view to ultimate retirement from that area. While the American business has been, in pursuance of a deliberate policy, considerably curtailed, the Jupiter has been fortunate in securing larger business at home in spite of the prevalent trade depression. The Premium income for the year ended 30th June, 1933 shows substantial increases in the Life and Fire branches, while there has been a slight decrease in the marine and accident departments. Only four or five years ago, the Company started life business and in this department, the Directors are intent on building a careful and safe business. The total new business in 1932-33 was Rs. 14.05 lakhs. At the end of the year, the life fund stood at Rs. 3.61 lakhs. The capital of the Company amounts to Rs. 23.75 lakhs; and the various funds aggregate to Rs. 18.8 lakhs. In the Fire department, the ratio of reserve to premium is 51 per cent. The Directors should lose no opportunity of making further additions to the reserve, far and above the customary 40 per cent., so that the ratio of reserve to premium comes to 70 per cent. in due course. In the marine account, the reserve position is very strong, the ratio of reserve to premium being 124.2 per cent. against 89.6 per cent. in the previous year. In the accident department, the reserve requires further strengthening. The funds of the Company are invested in giltedge securities or in American securities. Owing to the appreciation of the dollar in terms of the rupee, there is considerable profit on the American investments. A reversionary bonus to participating policies at the rate of 15 per thousand sum assured per annum in whole-life policies and at the rate of 12 per cent. per thousand per annum in the case of other classes of policies was declared at the first valuation of the Company. The Chairman of the Company is Mr. Lalji Narainji. The Managing Agents are Messrs. Lalji Narainji & Co., who have influential connections and are, therefore, in a position to help the Company with large business. The Secretary is Mr. K. S. Ramachandra Iyer, who is well-known in connection with his activities for the consolidation of the Indian insurance companies.

Life Account.

(In thousands of Rs.)

	1931-32.	1932-33.	1933-34.
New business—			
Number (actual) ...	747	810	811
Amount	15,08	15,07	14,05
Premiums on New Business	88	86	68
Total Premiums ...	1,70	1,96	2,44
Claims	32	26	29
Expenses ...	91	85	98
Life fund at the beginning of the year ...	70	1,19	2,11
Life fund at the end of year	1,19	2,11	3,61
Ratio of expenses to premium ...	54%	43.4%	40.0%

Fire Account.

Premiums ...	10,19	12,54	14,76
Claims	4,42	4,80	6,17
Expenses	5,00	5,84	6,52
Total Reserves ...	4,80	5,50	7,50
Ratio of claims to premium	43%	38.4%	41.8%
Ratio of expenses to premium ...	49%	46.6%	44.2%
Ratio of reserves to premium ...	47%	43.9%	50.8%

Marine Account.

Premiums ...	2,13	2,40	1,77
Claims ...	1,57	1,09	79
Expenses ...	71	1,01	86
Total reserves ...	2,15	2,15	2,20
Ratio of claims to premium	74%	45.4%	44.6%
Ratio of expenses to premium ...	33%	42.1%	48.9%
Ratio of reserves to premium	101%	89.6%	124.2%

Accident Account.

Premiums ...	2,34	2,11	1,49
Claims ...	82	1,07	97
Expenses ...	97	99	77
Total reserves ..	1,00	1,10	1,10
Ratio of claims to premiums	35%	50.7%	64.8%
Ratio of expenses to premiums ...	41%	46.9%	51.4%
Ratio of reserves to premiums	43%	52.1%	73.8%

Balance Sheet.

Liabilities—			
Capital	23,75	23,75	23,75
Funds—			
Fire	4,80	5,50	7,50
Marine	2,15	2,15	2,20
Accident ...	1,00	1,10	1,10
Life fund ...	1,19	2,11	3,61
Other funds ...	2,73	4,52	4,39
Total funds ...	11,87	15,38	18,80
Other items ...	7,13	9,56	15,64
Total ...	42,75	48,69	58,19
Assets—			
Giltedge securities ...	29,78	33,94	34,98
Branch, agent's and other balances ...	8,19	10,05	7,68
Other items ...	2,68	99	9,36
Cash	2,10	3,71	6,17
Total ...	42,75	48,69	58,19

Profit and Loss Account.

Receipts—			
Brought in ...	21	23	9
Transferred from—			
Fire Account ...	...	1,39	24
Marine Account ...	57	39	15
Accident Account ...	41	...	...
Interest	1,03	1,07	1,09
Other items ...	21	6	80
Total	2,43	3,14	2,37
Disbursements—			
Dividend: Rate % ...	3¾%	3⅓%	...
Amount ...	95	62	1,26
Allocations ...	1,08	1,53	43
Other items ...	18	79	54
Carry forward ...	23	20	14
Total ...	2,43	3,14	2,37

THE LAKSHMI INSURANCE CO., LTD.

Head Office: LAHORE.

The progress of the Lakshmi in its brief existence of 10 years is, truly, a romance in the annals of Indian insurance. So far as we are aware, no other life office in India (or perhaps, in any other country) has under-written, from the beginning, so large a volume of business, conducted its affairs on so economical a basis, and pursued so scientific a financial policy as to be able to build up a life fund of Rs. 38 lakhs at the end of 10 years. There are companies which have been in existence for 20 years and which have not yet obtained a life fund of even half this size. 1930-31 recorded a setback in the progress of the Company, mostly because a good many of the officers and agents of the Lakshmi were rendered out of action by being imprisoned in connection with the civil disobedience campaign. 1931-32 resumed the old sturdy growth and during the year ending April 30, 1934, the new business of the company has exceeded the one crore mark. The ratio of expenses in 1932-33 was 33 per cent.; and for a company of 10 years standing, this is a remarkable achievement. The management is in the hands of Pandit K. Santanam, to whom a great part of the credit for the sturdy growth is due.

(In Thousands of Rs.)

	1930-31	1931-32	1932-33
New Business—			
Number of policies (actual) ...	2,687	3,483	4,245
Amount assured ...	55,19	68,19	80,18
New Premiums ...	2,76	3,30	3,87
Total Premiums ...	11,08	12,65	14,38
Claims ...	1,07	1,44	1,68
Expenses ...	3,57	4,09	4,74
Life fund at the beginning of the year ...	15,01	21,76	29,54
Life fund at the end of the year ...	21,76	29,54	37,94
Net increase ...	6,75	7,78	8,40
Ratio Expenses to Premiums ...	32%	32.4%	33.0%

Balance Sheet.

Liabilities—			
Capital ...	1,01	1,01	1,01
Life fund ...	21,76	29,54	37,94
Outstanding claims	67	59	77
Other items ...	1,02	1,74	2,29
Total	24,46	32,88	42,01

Assets—			
Giltedge securities	14,49	15,49	12,49
Loans on life policies	44	88	1,48
Other loans and Mortgages ...	5,19	9,65	17,76
House Property ...	1,65	1,92	2,26
Other Assets ...	2,38	3,21	3,01
Cash ...	31	1,73	5,01
Total	24,46	32,88	42,01

THE METROPOLITAN INSURANCE COMPANY, LTD.

(Established 1930)

Head Office: 28, POLLOCK ST., CALCUTTA.

Started in the year 1930, the Metropolitan Insurance Company has shown remarkable progress in the matter of procuration of New Business. Even during the first year of its life the new business of the company amounted to Rs. 40 lakhs nearly and during the second year ending December 31, 1932, the new business has been increased by over Rs. 2½ lakhs. The total premium income for the year 1932 amounted to Rs. 1.67 lakhs and the life fund at the end of 1932 stood at Rs. 62,000 having been increased by Rs. 25,000. The expense ratio at 84.4 per cent has slightly increased over the figure of 1931.

The balance sheet shows a paid up capital of Rs. 1.00 lakh, a life fund of Rs. 62,000 and other liabilities amounting to Rs. 48,000. The distribution of the assets is not quite scientific and we hope the directors will pay more attention to giltedged securities as one of the best items of assets.

(In thousands of Rs.)

New Business—	1932.
Sum assured ...	42,52
Total Premiums ...	1,67
Life fund at the beginning of the year ...	37
Life fund at the end of the year ...	62
Net increase ...	25
Claims ...	8
Expenses ...	1,41
Ratio of expenses to premium ...	84.4%

Balance Sheet.

Liabilities—	
Capital ...	1,00
Life Assurance fund ...	62
Claims outstanding ...	8
Other items ...	40
Total	2,10

Assets—	
Investments	85
Advances	38
Cash	17
Other items	70
Total	2,10

NATIONAL INDIAN LIFE INSURANCE CO., LTD.

(Established—1907)

Head Office: CALCUTTA

The National Indian Life Insurance Company has a strong Board of influential Directors and is under the Managing Agency of a reputable firm like Messrs. Martin & Co. It is, therefore, surprising that the Company has not made a more rapid and a more substantial progress than has been the case. Many of the companies, started contemporaneously with the National Indian, have a far larger life fund, underwrite a far greater amount of new business and earn a more substantial income in the year both from the premium and interest on investments. Companies of the standing of the "National Indian" should show much better results. That the "National Indian" has not done so well as it might, shows either that the Premium Tables compare unfavourably with those of other companies, or that the organization for securing new business is not the best. To all these criticisms, the answer may be given that Sir R. N. Mookerjee always prefers to pursue a conservative policy and build his business on a slow and sure basis; and that even if the National Indian has no sensational figures of one kind or another, its development has been on scientific lines and its present position is intrinsically sound. We readily agree that, judged by every canon of insurance, the growth of the National Indian has been on healthy lines and the Company has an impregnable position financially. But the real point of criticism is that the National Indian is eminently the kind of company in which a headier pace of progress could be achieved without anything like an appreciably extra effort. The life fund of the Company stands at Rs. 44.98 lakhs. The business on the books of the Company has been selected with the utmost care. The mortality experience of the Company is most favourable. Every attempt is being made to keep expenses under control. With all these in its favour, business conservatism seems to

be a virtue less needed than business enterprise. The investments of the Company are well spread. Mortgages on property in India account for Rs. 11.94 lakhs; loans on policies for Rs. 6.40 lakhs; giltedge and stock exchange securities for Rs. 27.52 lakhs. The total assets of the Company amount to Rs. 49.26 lakhs. The annual premium income in 1933 was Rs. 7.65 lakhs and the total income from all sources Rs. 10.10 lakhs. The increase in the life fund was Rs. 3.44 lakhs.

Life Account.

(In Thousands of Rs.)

	1931.	1932.	1933.
New Business—			
No. of Policies ...	1,249	1,261	1,727
Net sum Assured ...	20,22	17,47	24,05
Net new Premiums ...	1,11	93	1,03
Total net Premiums ...	7,67	7,33	7,65
Interest	2,22	2,30	2,45
Claims by death ...	1,31	1,78	1,31
„ „ maturities ...	1,93	3,57	2,09
Commission & Expenses ...	2,72	2,79	2,80
Life Fund at beginning of year	37,00	40,33	41,54
Life Fund at year end ...	40,33	41,54	44,98
Increase in Fund ...	3,33	1,21	3,44
Ratio of expenses to Primium ...	35%	38.1%	36.6%

Balance Sheet.

Liabilities—			
Capital	1,00	1,00	1,00
Life Fund	40,33	41,54	44,97
Outstanding Claims ...	1,83	2,21	1,94
Other Items ...	71	83	1,35
Total ...	43,87	45,58	49,26
Assets—			
Giltedge	19,77	15,18	11,69
Debentures ...	1,77	7,05	13,92
Mortgages and Loans ...	17,36	18,17	18,91
Other Shares and investments	2,58	2,70	2,13
Cash	61	86	52
Outstanding Premium and Interests ...	1,78	1,62	1,88
Total ...	43,87	45,58	49,26

Profit & Loss Account.

Receipts—			
Brought in	38	34	29
Interest	8	7	7
Shareholders' share of valuation Surplus ...	...		
Total Rs. ...	46	41	36
Disbursements—			
Dividends to Shareholders	12	12	13
Carried forward ...	34	29	23
Total Rs. ...	46	41	36

NATIONAL INSURANCE COMPANY, LTD.

Head Office: CALCUTTA.

The National Insurance Company was started in 1906 and owes its existence to the resurgent national feeling manifest throughout Bengal roundabout that year. The Company had made steady progress, making its appeal to the public by virtue of its low premium and safe investment policy. It occupies the third place amongst Indian life offices both in regard to volume of new business and in regard to the size of the life fund. The new business secured in 1933 came to Rs. 1.67 crores. The life fund at the beginning of the year was Rs. 1.82 crores and at the end of the year Rs. 2.04 crores. The total assets of the Company are Rs. 2.23 crores, of which loans on company's policies amount to Rs. 30.32 lakhs; first mortgages on properties in India to Rs. 24.1 lakhs; giltedge and bonds and shares to Rs. 1.3 crores; house property to Rs. 24.5 lakhs. It will, thus, be seen that the company's investment policy shows prudence as well as careful and scientific distribution of risks. But for the depreciation which had to be provided for in respect of Government securities, the increase of the life fund during 1931 should have been much more than what it actually was. With the recovery in giltedge prices in 1932 the reserves have been released and at the end of 1932 the life fund of the National has reached Rs. 1.82 crores. The National has started a subsidiary company, the National Fire & General Insurance Company for the purpose of transacting fire and accident business. All the capital of the subsidiary company is held by the National. The management of the Company is in the hands of Messrs. R. G. Das & Co., who have considerable business experience at Calcutta and Bombay.

Life Account.

(In thousands of Rs.)

New Business—	1931.	1932.	1933.
Number (actual) ...	6,899	7,847	9,058
Amount ...	1,32,31	1,50,04	1,67,15
Premiums on New Business ...	6,17	7,48	7,30
Total premiums ...	33,27	36,77	40,49
Interest and dividends	7,51	8,95	8,83
Claims by death ...	6,21	5,88	6,54
Claims by maturity ...	5,52	6,92	8.14
Expenses ...	9,21	10,03	11,11
Life fund at the beginning of the year	1,45,88	1,49,68	1,82,17
Life fund at the end of year ...	1,49,68	1,82,17	2,04,07
Net increase in life fund ...	3,80	32,49	21,90
Ratio of expenses to premium ...	28%	27.3%	27.4%

Profit and Loss Account.

Receipts—			
Brought in ...	33	1,14	1,13
Transferred from Revenue accounts ...	76	9	4
Other items ...	23	4	11
Total ...	1,32	1,27	1,28
Disbursements—			
Dividend rate % ...	8	12	12
Dividend amount ...	8	12	12
Allocations ...	10	1	1
Transferred to Balance Sheet ...	1,14	1,14	1,15
Total ...	1,32	1,27	1,28

Balance Sheet.

Liabilities—			
Capital ...	1,00	1,00	1,00
Life fund ...	1,49,68	1,82,17	2,04,07
Other funds ...	25,49	12,13	16,38
Total funds ...	1,75,17	1,94,30	2,20,45
Other items ...	4,78	4,73	1,60
Total	1,79,95	1,99,03	2,23,05
Assets—			
Giltedge securities ...	39,09	26,22	42 67
Bonds ...	57,73	51,75	75 87
Ordinary shares ...	4,40	26,10	14,89
Loans on life policies	23,48	27,88	30,32
Other loans and mortgages ...	21,17	20,60	24 11
House property ...	17,39	21,83	24 52
Cash ...	86	13,67	3 91
Other items ...	15,83	10,98	6,76
Total ...	1,79,95	1,99,03	2,23,05

NEW INDIA ASSURANCE CO., LTD.

(Established 1919).

Head Office : ESPLANADE ROAD, BOMBAY.

Calcutta Office : 100, CLIVE STREET.

The New India Assurance Company was incorporated in Bombay in 1919. It is the biggest in point of size, volume of general business, and paid up capital amongst all the Indian Insurance companies. The Company was started in close association with the well-known firm of Tata Sons ; in fact, it was the latter that conceived the entire scheme and executed it in the most spectacular manner in the boom days of 1919. On the first directorate were associated, with representative of Tatas, almost every prominent businessman of Bombay. The Company had thus the unique fortune of starting business under most impressive auspices and with most influential connections. The capital of the Company, at the start, was nearly Rs. 1,20 lakhs ; but, at a later stage, it was felt that so large a capital was unnecessary and that two-fifths of the amount paid-up on each share should be refunded. The present capital of the New India is, therefore, Rs. 71.21 lakhs ; even at this reduced figure, it has the largest paid-up capital of any Indian Insurance Company. Till 1930, the Company was doing every manner of general insurance business but it did not transact life business. A Life Department has since been opened and the Company has been successful in attracting a substantial life insurance business, which shows sign of rapid progress. In the early years, the premium income of the general departments was derived predominantly from the foreign field. But in recent years, the percentage on Indian business to its total business has risen. In the year ending March 31, 1933, the fire premium income amounted to Rs. 44 lakhs and the Directors' report states that the American business showed a further substantial decrease which was, however, offset by a very substantial increase in the Indian business. The Fire fund stood at Rs. 33 lakhs or 80 per cent. of the premium income. The under-writing profit in the Fire Department was Rs. 2.3 lakhs, of which Rs. 1.1 lakhs was transferred to profit and loss account. In the Marine account, premium income totalled Rs. 21 lakhs and the Fund stood at Rs. 24 lakhs. The ratio of reserve to premium in the Marine section is thus as high as 114 per cent. and compares with 100 per cent. in the previous year. In the Accident Department, there was a premium income of Rs. 5,18 lakhs. A sum of Rs. 95,000 was transferred from the Accident account to General Profit and Loss Account. The reserve in this department stands at the satisfactory figure of 88 per cent. of premium income. In regard to life business, the Company was able to under-write policies for Rs. 1,05 lakhs in 1931-32. The rate of dividend was maintained at 7½ per cent. as against 6⅝ per cent. in 1929-30. The shareholders of the Company, who had a pleasant surprise four years ago of getting a refund of Rs. 10 per share, can now have the satisfaction of having their funds invested in a company whose dividend earning capacity is progressively increasing. The Chairman of the Company is Mr. N. B. Saklatvala, C.I.E., of the firm of Tata Sons. The General Manager is Mr. R. J. Duff, an insurance man of great experience and organising ability.

Fire Account.

(In Thousands of Rs.)

	1930-31	1931-32	1932-33
Premiums ...	47,99	42,05	44,38
Claims	26,93	24,11	23,57
Expenses ...	18,54	17,78	18,57
Reserve at 40% of Premium ...	19,19	16,82	17,75
Additional reserve	14,00	16,40	17,65
Total reserves ...	33,19	33,22	35,40
Ratio of claims to Premium ...	56%	57.3%	53.1%
Ratio of expenses to Premium ...	40%	42.3%	41.8%
Ratio of reserves to Premium ...	69%	79.0%	79.8%

Marine Account.

Premiums ...	23,20	22,84	20,71
Claims	19,56	19,30	16,98
Expenses ...	3,14	3,51	3,33
Total reserves ...	22,00	22,85	23,50
Ratio of claims to Premium ...	84%	84.5%	82.0%
Ratio of expenses to Premium ...	14%	15%	16.1%
Ratio of reserves to Premium ...	95%	100%	113.5%

Accident Account.

Premiums ...	5,65	5,95	5,18
Claims	2,31	2,71	2,58
Expenses ...	2,06	2,29	2,14
Reserve at 40% of Premium ...	2,26	2,38	2,38
Additional reserves	1,70	2,00	2,00
Total reserve ...	3,96	4,38	4,57
Ratio of claims to Premiums ...	41%	45.5%	49.8%
Ratio of expenses to Premiums ...	36%	38%	41.4%
Ratio of reserves to Premium ...	70%	74%	88.2%

Life Account.

New Business—			
Number of policies	24,79	38,63	5,015
Amount assured ...	71,04	80,99	1,05,22
Premium on new business ...	2,80	4,60	4,64
Total premiums ...	4,07	7,26	10,84
Claims by death ...	49	31	1,24
Expenses ...	2,74	4,27	5,34
Life Fund at beginning of year ...	31	1,28	4,14
Life Fund at year-end	1,28	4,14	8,68
Net increase in funds	97	2,86	4,54
Ratio of expenses to Premium ...	67%	59%	49.3%

Balance Sheet.

Liabilities—			
Capital	71,21	71,21	71,21
Fire Fund ...	33,19	33,22	35,40
Marine Fund ...	22,00	22,85	23,50
Accident Fund ...	3,96	4,38	4,57
Life Fund ...	1,28	4,14	8,68
Reserve Fund ...	5,98	6,22	6,30
Amounts due to other Companies ...	3,74	2,49	3,57
Outstanding claims	3,33	5,51	3,97
Other Liabilities ...	14,92	15,47	19,06
Total ...	1,59,61	1,65,49	1,76,26
Assets—			
Giltedge Securities	88,39	79,71	94,87
Debentures and Preference Shares ...	7,77	14,01	8,55
U. S. A. Investments	19,08	19,96	21,02
Agency and Branch Balances ...	10,70	11,63	11,19
Cash	14,57	15,68	18,73
Other Assets ...	19,10	24,50	21,90
Total	1,59,61	1,65,49	1,76,26

Profit and Loss Account.

Receipts—			
Brought in ...	1,72	1,76	2,01
Transferred from—			
Fire account ...	1,51	1,58	1,05
Accident account	57	70	45
Marine Account ...	21	14	69
Interest, etc. ...	4,19	4,21	4,22
Other receipts ...	5	28	9
Total ...	8,25	8,67	8,51
Disbursements—			
Dividend rate %		7½%	7½%
Dividend amount	5,34	5,34	5,34
Allocations ...	49	63	...
Other items ...	66	69	...
Carried forward ...	1,76	2,01	2,03
Total ...	8,25	8,67	8,51

ORIENTAL GOVERNMENT SECURITY LIFE ASSURANCE CO., LTD.

(Established 1874).

Head Office: BOMBAY.

Judged by any criterion, Oriental Government Security Life Assurance Company is far and out the biggest life office in India. Its progress during recent years is phenomenal and amazing. It has been beating record after record, all its own for there is not a single other Indian Life Office whose figures can approach anywhere near that of the Oriental. During the year 1933 the company received 55,280 proposals amounting to Rs. 10.14 crores and of this the policies issued amounted to 38,191 assuring a sum of Rs. 7.04 crores as against 26,481 policies assuring the sum of Rs. 5.94 crores in the year 1932. This amount is the highest recorded new-business of the company as well as any other company working in India. It may also be mentioned that the Oriental ranks tenth among the insurance companies of the world in the matter of ordinary life new-business effected in 1933. The premium on the new-business came to Rs. 33.54 lakhs while the total premium received amounted to Rs. 2.19 crores. Interest income was Rs. 65.88 lakhs and on the outgo side claims absorbed Rs. 90.80 lakhs and management expenses took Rs. 46.53 lakhs working out

an expense ratio of 21.6 per cent. Life fund was increased substantially by Rs. 1.82 crores to Rs. 13.91 crores.

The investment policy of the Oriental is of the most conservative kind—so conservative, indeed, that the Directors and management have come to feel that this policy is exercising considerable restriction in their choice of investments and that some liberalising is urgent and imperative. For the present, whatever is not invested in buildings and loans on policies is invested in giltedge securities. The securities are kept at or below cost price though the present market value of the same has considerably appreciated by nearly Rs. 2.66 crores as on December 31, 1933. In view of the fact that the Directors have decided to value the liabilities of the company as on December 31, 1933, at an interest rate of 3½ per cent. which is ¼ per cent. less than the rate used in the 1930 valuation, the Directors have revalued their stock exchange securities on the basis of a 5 per cent. gross yield and thereby increased the value of the assets by Rs. 52¼ lakhs over the book value and this released appreciation of securities has been utilised to increase the life fund. Even after this release, the book value of the securities is more than Rs. 2 crores below the market value. Besides this inner strength there is the investment reserve fund of Rs. 25 lakhs which is still kept in tact though there is no need for the same at the present moment. Thus the recent balance sheet shows the unassailable and the great intrinsic strength of the company. The management is in the capable hands of Mr. H. E. Jones.

(In Thousands of Rs.)

	1931.	1932.	1933.
New Business—			
Number (actual)	26,486	29,982	38,191
Amount ...	5,34,61	5,94,01	7,04,26
Premium on New Business ...	29,27	32,23	33,54
Total Premium ...	1,86,76	2,00,12	2,18,61
Interest ...	56,61	60,24	65,88
Claims—			
By Death ...	41,34	39,76	44,27
By Maturity ...	44,86	45,29	46,53
Total ...	86,20	85,05	90,80
Commission and expenses ...	41,84	42,08	47,32
Life Fund—			
(a) At beginning of the year	10,00,96	10,93,43	12,09,77
(b) At the end of the year	10,93,43	12,09,77	13,91,46
Increase in Funds ...	92,47	1,16,34	1,81,69
Ratio of expenses to premiums	22.4%	21%	21.6%

Balance Sheet.

Liabilities—			
Capital ...	6,00	6,00	6,00
Life Assurance Fund ...	10,93,43	12,09,77	13,91,46
Investment Reserve Fund ...	25,00	25,00	25,00
Contingencies Reserve Fund ...	5,51	5,51	5,51
Building Fund ...	1,75	1,91	2,07
Total Funds ...	11,31,69	12,48,19	14,30,04
Other Items ...	42,93	41,35	46,79
Total ...	11,74,62	12,89,54	14,76,83
Assets—			
Giltedge ...	8,49,46	9,06,86	10,37,00
Bonds ...	95,84	1,26,22	1,65,77
Mortgage and Loans ...	1,31,33	1,49,38	1,60,06
Other Investments	41,61	44,16	46,21
Other Items	44,64	50,95	55,54
Cash	9,76	11,97	12,25
Total ...	11,74,62	12,89,54	14,76,83

THE TRITON INSURANCE CO., LTD.

Head Office: CALCUTTA.

The Triton insurance Company, which is the oldest general insurance company registered in India, has, by adopting a policy of selecting the cleanest business and building the company on the cleanest financial foundations, reached a position to-day in which it is able to claim the enviable record of having as high a ratio of reserves to premiums as 491 per cent. It is no exaggeration to say that in all our studies of the balance sheets of world insurance companies, we have not come across a reserve position of this magnitude and strength. The capital of the Company stands at the modest figure of Rs. 5.75 lakhs. Its premium income is also at the unpretentious figure of Rs. 6.57 lakhs ; but the reserve fund amounts to the colossal sum of Rs. 32.25 lakhs. The total resources of the Company are Rs. 49.50 lakhs, of which giltedge and cash amount to Rs. 47 lakhs nearly. The ratio of claims to premium is only 36.4 per cent. ; and it was as low as 25 per cent. in 1930. The ratio of expenses to premium is 51.5 per cent. Owing to a favourable claims experience and owing to the large income from investments the surplus on 1933 account was Rs. 3.01 lakhs of which Rs. 2.3 lakhs was paid as dividends at the rate of 40 per cent., the carry forward being Rs. 97,000

Revenue Account.

(In Thousands of Rs.)

	1931.	1932.	1933.
Premiums ...	6,91	6,52	6,57
Claims ...	3,23	2,78	2,39
Expenses ...	3,46	3,35	3,38
Reserve Funds ...	35,25	31,25	32,25
Ratio of Claims to Premiums ...	47%	41.9%	36.4%
Ratio of Expenses to Premiums ...	50%	51.4%	51.5%
Ratio of Reserves to Premiums ...	510%	479%	491%

Balance Sheet.

Liabilities—			
Capital ...	5,75	5,75	5,75
General Reserve Fund for exceptional losses	26,75	26,75	26,75
Other Reserve Fund	8,50	8,50	8,50
Underwriting Suspense Account ...	3,54	3,10	3,13
Debts due by the Company ...	2,91	2,29	2,10
Other items ...	3,06	3,25	3,27
Total ...	50,51	49,64	49,50
Assets—			
Giltedge ...	46,45	46,77	46,56
Debts due to the Company ...	2,67	1,54	1,67
Cash ...	71	67	60
Other assets ...	68	66	67
Total ...	50,51	49,64	49,50

Profit and Loss Account.

Receipts—			
Brought forward ...	81	76	95
Interests, etc.	2,03	2,64	...
Transferred from underwriting a/c.	22	20	3,01
Total ...	3,06	3,60	3,96
Disbursements—			
Dividend ...	2,30	2,30	2,30
Dividend Rate % ...	40%	40%	40%
Allocation ...	...	35	69
Carry forward ...	76	95	97
Total ...	3,06	3,60	3,96

THE UNITED INDIA LIFE INSURANCE CO., LTD.

(Established 1906).

Head Office : MADRAS.

While Northern India and the Western Presidency have any number of indigenous life insurance offices, South India, till a few years ago, had only one life office of its own ; but it had the satisfaction that the institution was a model and pattern of what a life insurance company should be. Those who have been in charge of the United India have, from the beginning, been guided by most wholesome insurance principles. They built the institution, brick by brick, with extreme care and with the thought that in each little part, the edifice should be sound and strong. Its investment policy has been most scientific ; and there are no dud assets of any kind. There was a change in the plan of management of the Company a few years ago. And the new management coincided with the redrafting of the constitution of the Company on a basis which may well serve as the model for the Indian life offices. We believe that the Articles of Association of the United India are as near perfection as human ingenuity could make them. The policy-holders have a good voice in the directorate ; and their interests are completely secured and guaranteed by the creation of the policy-holders' Trust Fund. The management is in the capable hands of Mr. M. K. Srinivasan. The life fund at the end of 1933 amounted to 47.65 lakhs ; and there was an investment reserve fund of Rs. 5.92 lakhs. The new business of the Company is round about Rs. 80 lakhs ; and great vigilance is exercised in the selection of risks. The ratio of expenses has increased from 26 per cent. in 1930 to 32.8 per cent. 1931 and 32.5 per cent. in 1933. The valuation of the last quinquennium made as on 31st December, 1932 disclosed a surplus of Rs. 6.1 lakhs, and bonuses on a liberal scale have been declared, *viz.*, Rs. 22-8 per Rs. 1,000 on Whole Life, and Rs. 18 per 1,000 on Endowment Policies.

(In thousands of Rs.)

	1931.	1932.	1933.
New Business—			
Number	2,797	3,325	4,774
Amount	42,94	49,66	66,41
New Premiums ...	2,27	2,39	3,00
Total Premiums ...	8,74	10,37	12,76
Claims	2,09	2,71	3,43
Commission and Expenses	2,86	3,21	4,15
Life Fund at the beginning of the year	35,57	36,83	42,36
Life Fund at the end of the year ...	36,83	42,36	47,65
Net increase in the Fund	1,26	5,53	5,29
Ratio of Expenses to Premium	32.8%	31.0%	32.5%

Balance Sheet.

Liabilities—			
Capital	79	79	79
Life Fund	36,83	42,36	47,65
Investment Reserve Fund ...	5,94	5,94	5,92
Outstanding Claims ...	1,00	1,25	1,84
General Fund ...	...	32	43
Other items ...	1,90	2,11	3,29
Total ...	46,46	52,77	59,92

Assets—			
Giltedge Securities ...	31,77	28,43	29,53
Debentures and Preference Shares ...	1,21	1,21	1,21
Equity Shares ...	88	41	41
Fixed Deposits ...	2,40	9,00	8,30
Loans on Life Policies	4,07	4,61	6,96
Other Loans and Mortgages ...	1,97	2,98	5,12
Other Assets ...	3,33	5,10	5,80
Cash	83	1,03	2,59
Total ...	46,46	52,77	59,92

THE WESTERN INDIA LIFE INSURANCE CO., LTD.

(Established—1913.)

Head Office:—Satara City.

The Western India Life Insurance Company is a clean and compact life office with a steady volume of clean business and with a satisfactory growth of life fund year by year. At 1933-end, the life fund stood at 41.97 lakhs, the increase over the previous year being Rs. 6.8 lakhs. In addition to the life fund, the company has a reserve fund which now stands at Rs. 6 lakhs. The expense ratio is low at 23.8 per cent.

The last valuation of the company was made as on 31st December, 1932, and a surplus of Rs. 5 lakhs nearly was made in spite of more stringent bases being used. The actuary has recommended the distribution of a simple reversionary bonus of Rs. 25 per thousand per annum on whole life policies and Rs. 20 per thousand per annum on endowment policies. A Chief Agency of this company was opened in Calcutta in 1932.

(In Thousands of Rupees.)

	1931.	1932.	1933.
New Business—			
Number ...	2,532	3,051	3,259
Amount ...	31,53	37,13	37,49
New Premiums ...	1,67	1,96	1,78
Total Premiums	8,26	9,38	10,51
Claims ..	1,02	1,68	2,26
Expenses and Commission ...	2,05	2,27	2,50
Life fund at the beginning of the year ...	23,18	28,47	35,19
Life fund at the end of the year	28,47	35,19	41,97
Net increase in fund ...	5,29	6,72	6,78
Ratio of Expenses to Premiums ...	24.8%	24.2%	23.8%

Balance Sheet.

Liabilities—			
Capital ...	68	68	68
Life fund ...	28,47	35,19	41,97
Reserve funds ...	5,97	6,26	5,86
Outstanding claims	68	93	1,69
Other liabilities ...	1,63	1,69	3,22
Total ...	37,43	44,75	53,42
Assets—			
Investment ...	31,54	38,34	45,65
Loans on policies	3,16	3,46	3,95
Other loans and Mortgages ...	43	48	28
House Property ...	29	29	29
Other assets ...	2,01	2,18	3,25
Total	37,43	44,75	53,42

THE ZENITH LIFE ASSURANCE COMPANY, LIMITED.

Head Office: Bombay.

The Zenith Life Assurance Company has had to contend against the first great handicap of young companies, namely, the prejudice of the general insuring public in favour of companies with tall figures. The Zenith has not yet reached a stage when it could appeal to the public by virtue of the large amount of new business secured or the big size of the life fund built up. It has had to depend upon the resourcefulness of the management to devise novel and attractive plans of business calculated to compel the attention and suit the special requirements of the prospective Indian insurers. Mr. Byramjee Hormusjee, the General Manager of the Company, has proved equal to the occasion and devised policies of great merit and value to the insurers. The Peerless Policy, the Everyman Policy and the Swaraj Policy bear eloquent testimony to the ingenuity of Mr. Hormusjee in this direction. In 1933, new business underwritten by the Company came to Rs. 27.65 lakhs, the premium income to Rs. 4.92 lakhs and the total income to Rs. 5.44 lakhs. After meeting all the outgo, a net sum of Rs. 1.60 lakhs was available towards increase in the life fund. The following table gives, at a glance, the progress of the Company in the last five years.

	Life Funds Rs.	Increase in the year. Rs.
1929 ...	5,45,710	1,07,095
1930 ...	6,91,592	1,45,881
1931 ...	6,94,478	2,886
1932 ...	9,82,576	2,88,097
1933 ...	11,42,812	1,60,236

The Company has confined its investments entirely to Government of India and Trust Securities. The results of the valuation for the year 1932 are very encouraging and show the first steps on the way to progress. The valuation disclosed a surplus of Rs. 38,262, which on the recommendation of the Actuary, the Directors propose to distribute as follows:—Reserve Fund Rs. 5,000 ; Reversionary bonus to participating policyholders Rs. 25,232 ; Dividend to shareholders Rs. 3,750 and balance to be carried forward Rs. 4,280.

New Business— (In thousands of Rs.)

	1931.	1932.	1933.
No. of Policies ...	1,069	1,193	1,483
Sum Assured ...	21,50	23,70	27,65
Premium on new business ...	1,24	1,03	1,21
Total Premium ...	4,22	4,44	4,88
Claims by death ...	50	85	80
Claims by maturities	51	50	31
Commission and Expenses ...	1,95	2,12	2,65
Life Fund at beginning of year ...	6,92	6,94	9,83
Life Fund at year-end	6,94	9,83	11,43
Increase ...	2	2,88	1,60
Ratio of Expenses to Premium ...	46.2	47.7	54.3

Balance Sheet.

Liabilities—

	1931.	1932.	1933.
Capital ...	50	50	50
Life Fund ...	6,94	9,83	11,43
Reserve Funds ...	1,58	8	13
Outstanding Liabilities and Claims ...	72	89	99
Premium Deposits ...	9	8	10
Total ...	9,83	11,38	13,15

Assets—

	1931.	1932.	1933.
Giltedge ...	7,44	8,35	10,56
Loans on Policies ...	77	83	96
Cash ...	1,01	1,37	53
Other items ...	71	83	1,10
Total ...	9,83	11,38	13,15

INSURANCE SECTION:

REVIEWS OF BALANCE SHEETS

BRITISH INSURANCE COMPANIES

ALLIANCE ASSURANCE CO., LTD.

(Established—1824.)

The Alliance Assurance Company, with its total funds equivalent to £37 million at the end of 1933, is one of the bigger giants of the British insurance world. The outstanding feature of the Alliance is that alike in the kinds of business transacted and the distribution of assets, the utmost regard is paid to correct proportion and balance. No one department is disproportionately small or big in relation to any other. And each department is accounting for a substantial business and discloses assured growth. The premium income of the combined life account was £1.45 million in 1933. The net premium income in the fire section was £2.02 million. The marine accounts yielded £.34 million. Accident and Miscellaneous sections accounted for a total premium income of £1.16 million. By the same token, the investments are well-distributed, due regard being had to safety and satisfactory yield. The financial, investment and reserve policy of the Directors is conservative in the best sense of the term. As Mr. Lionel N. De Rothschild, the Chairman, said at the annual meeting, insurance managements will now have to concern themselves more and more with problems arising from the great fall which has occurred in the rate of interest that can be obtained on high-class securities since the British Conversion of the 5 per cent. War Loan. While there is cause for gratification that 87½ per cent. of the marketable securities of the Alliance are within the British Empire, and only about 12½ per cent. are spread over the rest of the world, prudence demands the strengthening of the reserves in such a way as to mitigate the effects of lower interest yields on the bonus-paying capacity of the Company. With this end in view, the Directors have decided that of the surplus disclosed in the valuation, as much as £823,337 should be carried forward. This is more than double the amount that was brought in at the beginning of the quinquennium the latter amount being £380,960.

In the fire section, a development of recent years is the constantly increasing pressure that is brought to bear on the large composite companies to undertake risks of a specially hazardous nature such as earthquake, volcanic eruption, hurricanes, etc. Acceptance of this call of business may mean extra risk ; and with a view to eliminate the danger of any unduly heavy losses occurring in any one year, the additional reserve of the fire department has been strengthened by the allocation of £100,000 out of the profits of 1933. Despite such a rigorous policy as regards building of reserves, the Company has been able, as a result of the trading operations of the year, to provide for all outgoings of every kind, to maintain the dividend, and to provide for a carry-forward of almost the same amount to the next year's account. An achievement of this character in a year in which the reserves have been increased by something like a quarter of a million reflects the highest credit on the skill and efficiency of management.

Life Account.

New Business— (In thousands of £)	1931.	1932.	1933.
Number of policies ...	5,177	5,258	5,120
Amount ...	3,771	3,836	3,421
Premiums on New Business ...	218	332	213
Total Premiums ...	1,425	1,501	1,447
Interest Dividend and Rents ...	906	901	874
Claims by death ...	897	963	1,015
Claims by maturity	559	511	575
Commission and expenses	142	149	144
Life fund at the beginning of the year	21,810	21,747	22,292
Life fund at year end	21,748	22,292	22,504
Increase in fund ...	438	545	212
Ratio of expenses to premium ...	9.9%	9.9%	9.95%

Annuity Account.

	(In thousands of £)		
	1931	1932	1933
Consideration for annuities granted ...	79	227	214
Interest Dividends and Rents ...	40	43	44
Annuities paid ...	97	94	105
Commission and expenses	3	5	5
Annuity funds at beginning of the year	991	999	1,159
Annuity funds at year end ...	999	1,159	1,282

Fire Account.

Premiums ...	2,035	2,057	2,019
Claims ...	728	770	702
Expenses ...	927	902	901
Reserve at 40% of premium income	814	823	807
Additional Reserve ...	2,000	2,000	2,100
Total Reserves ...	2,814	2,823	2,907
Ratio of claims to premium ...	35.8%	37.4%	34.8%
Ratio of expenses to premium ...	45.6%	43.9%	44.6%
Ratio of reserve to premium ...	138.3%	137.2%	144.0%

Marine Account.

Premiums ...	480	422	338
Claims ...	320	314	204
Expenses ...	103	115	116
Reserve ...	697	725	750
Ratio of reserve to premium ...	145.2%	171.8%	221.9%
Ratio of expenses to premium ...	21.5%	27.2%	34.3%
Ratio of claims to premium ...	66.7%	74.4%	60.4%

Accident and Miscellaneous Account.

Premiums ...	1,193	1,162	1,159
Claims ...	627	620	563
Expenses ...	447	457	455
Reserve ...	1,194	1,179	1,182
Ratio of expenses to premium ...	37.5%	39.3%	39.3%
Ratio of reserve to premium ...	100.0%	101.5%	102.0%
Ratio of claims to premium ...	52.6%	53.4%	48.6%

Balance Sheet.

Liabilities—			
Capital ...	1,703*	1,703*	1,703*
Funds :—			
Life ...	21,748	22,292	22,504
Annuity ...	999	1,159	1,282
Sinking and capital redemption ...	1,610	1,823	1,972
Fire ...	2,814	2,823	2,907
Marine ...	1,198	1,124	1,103
Accident ...	1,194	1,179	1,182
Reserve fund ...	1,000	1,100	1,200
Other funds ...	858	899	594
Outstanding claims	885	927	933
Other items ...	1,800	1,876	2,058
Total ...	35,809	36,905	37,438
Assets—			
Giltedge securities ...	8,971	10,090	12,786
Debentures and preference shares ...	6,019	6,222	6,453
Other stocks and shares	985	956	846
Shares in subsidiary companies ...	1,103	1,103	1,103
Loans on company's policies ...	2,524	2,428	2,286
Other loans and mortgages ...	12,159	11,967	10,091
Cash ...	400	602	338
Other items ...	3,648	3,537	3,535
Total ...	35,809	36,905	37,438

(*Includes capital stock of subsidiary companies).

Profit and Loss Account.

	(In thousands of £)		
	1931.	1932.	1933.
Receipts—			
Brought in ...	1,231	1,230	1,240
Transferred from fire account ...	469	460	410
Transferred from marine account ...	76	105	75
Transferred from accident a/c. ...	174	157	185
Other items ...	142	149	183
Total ...	2,092	2,101	2,093
Disbursements—			
Dividends ...	491	476	475
Transferred to reserve fund ...	100	100	100
Other items ...	271	285	287
Carried forward ...	1,230	1,240	1,231
Total	2,092	2,101	2,093

ATLAS ASSURANCE CO., LTD.

(Established 1808).

Head Office : LONDON.

Bombay Office : DOUGALL ROAD, BALLARD ESTATE.

Calcutta Office : 4, CLIVE ROW.

Atlas Assurance Company, is one of the big composite insurance companies of England doing extensive foreign business in Life, Fire, Marine and Accident branches. Like almost all other companies of world-wide repute, Atlas has experienced slight reductions in the premium incomes of the fire, marine and accident departments. This is mostly due to the fluctuations in the foreign currency exchange rates, particularly the American Dollar depreciation, and to the unsettled economic conditions that prevailed in various countries during last year. The results as a whole are good, showing reductions in the claim ratio and increases in the underwriting profits. The total pre-

mium income of the company from all its branches amounted to £3.564 million and the total assets stand at £16 million nearly.

The new business of the life department at £2.854 million is £400,000 less than that of the previous year though the number of policies issued at 3,813 is 316 more than last year's. The total premium income of the year was £975,000 and the interest income £425,000. The life fund was increased by more than £1 million to £10.148 million. The expense ratio has fallen to 13.5 from 13.8. In the fire department the premium income at £1.759 million was £148,000 less than that of the previous year; but the loss ratio went down by nearly 6 per cent. thereby enabling the release of a considerable sum of £121,000 as underwriting profits. The reserves at £2,015 million is 115 per cent. of the premium income. The accident premiums are nearly the same as in the last year and the profits earned amounted to 7.8 per cent. of the premium income. Accident fund stands at £402,000 or 87 per cent. of the premium income. The strong position of the marine reserves amount to 282 per cent. of the premium income which is noteworthy.

The profit and loss account shows a total available sum of £511,000 including the balance of £214,000 brought forward from last year's account and after payment of dividends at 32 per cent. and other allocations, a sum of £238,000 is carried forward to the next year's acount.

Life Account.

(000 omitted £)

	1932.	1933.
New Business—		
Policies No. ...	3,497	3,813
Sum Assured ...	3,415	2,854
Premium ...	131	139
Total Premium ...	930	975
Claims by death ...	269	243
,, Maturity ...	143	160
Expenses ...	128	132
Life fund at the beginning of the year' ...	7,904	9,064
Net increase ...	1,660	1,083
Ratio of expenses to Premium ...	13.8%	13.5%

Fire Account.

Premiums ...	1,908	1,759
Claims ...	1,032	847
Expenses and Commission	875	851
40% of Reserves for unexpired Risks ...	763	704
Additional reserve ...	1,312	1,311
Total reserve ...	2,075	2,015
Ratio of claims to Premium ...	54.1%	48.2%
Ratio of expenses to Premium ...	45.86%	48.3%
Ratio of reserves to Premium ...	108.8%	114.5%

Employers' Liability, Accident and General Insurance Account.

Premiums ...	461	461
Claims ...	229	221
Expenses and Commission	192	191
40% of Reserves for unexpired risks ...	184	184
Additional Reserve ...	208	218
Total Reserve ...	392	402
Ratio of claims to Premium ...	49.7%	47.9%
Ratio of expenses to Premium ...	41.6%	41.4%
Ratio of reserves to Premium ...	85.0%	87.2%

Marine Insurance Account.

Premiums ...	135	113
Claims ...	34	22
Expenses and Commission	14	14
Total Reserve ...	369	380
Ratio of claims to Premium ...	25.3%	19.5%
Ratio of expenses to Premium ...	10.7%	12.4%
Ratio of Reserves to Premium ...	273.3%	336.3%

Sinking Fund and Capital Redemption Insurance Account.

Premiums ...	49	256
Claims ...	61	16
Expenses and Commission	2	4
Total reserve ...	390	635
Ratio of expenses to Premium ...	4.1%	4.1%

Profit and Loss Account.

Balance brought Forward not carried to other accounts (nett) ...	193 128	214 115
Profit from Fire a/c. ...	49	120
Profit from employers' liability accident and general a/c. ...	45	36
Profit from sinking fund and capital redemption a/c. ...	8	...
Allocations ...	30	97
Dividend ...	176	176
Balance carried forward	214	238
Dividend rate % ...	32	32
Interest dividend etc.,		

Balance Sheet.

Liabilities—		
Capital ...	550	550
Life Assurance and annuity fund ...	9,064	10,148
Fire insurance fund ...	2,075	2,015
Employers' liability accident and General Insurance funds ...	392	402
Marine Insurance fund	369	380
Sinking fund and capital redemption fund ...	390	635
Other Reserves ...	502	385
Outstanding claims ...	295	316
Other items ...	1,123	1,138
Total ...	14,760	15,969

Assets—

Investments ...	11,471	10,884
Mortgages and Loans	960	1,729
Loans on company's policies	535	489
Branch and agents' Balances	630	593
Cash ...	680	868
Other Items ...	484	1,406
Total	14,760	15,969

CALEDONIAN INSURANCE COMPANY, LTD.

(Established 1805)

Head Office : EDINBURGH.

Calcutta Office: B-3, CLIVE BUILDINGS.

The Caledonian is the oldest Scottish insurance office, and transacts all classes of insurance business. The accounts of the company for the year ending December 31, 1933, show that the premium incomes of the general branches of insurance have suffered slight backward movement compared to the results of the previous year. However the underwriting profits of the fire and the motor departments, the two largest sections of the company, have greatly increased. The life department shows steady and continuous expansion.

The new life business for the year under review amounts to 1,956 policies assuring a sum of £1.472 million representing an increase of 69 policies and £233,000. The total premiums received amount to £557,000 and the ratio of expenses to the premium income works out to 15.7 per cent. The life and annuity fund has been increased by £153,000 to £7.378 million. The triennial valuation of the life liabilities and assets as on December 31, 1933, revealed a surplus of £449,000 which was sufficient to declare a bonus of 42 sh. per cent. per annum on whole life policies and 40 sh. per cent. per annum on endowment policies, to allot a sum of £37,000 to shareholders and to carry forward a sum of £103,000 unallotted.

The fire premiums have fallen by £69,000 to £740,000 but a good saving of nearly 5 per cent. in the loss ratio has enabled the company to increase the trading profits to £43,000 or 5.8 per cent. as against 0.5 per cent. in the previous year. The total reserves of this department at £796,000 are 107.6 per cent. of the premium income.

The general and motor premiums have decreased by £47,000 to £400,000 and here also the loss ratio has considerably fallen by about 10 per cent. to 61.8 per cent. and the underwriting profits of the motor section alone appear as £12,000 or 4.1 per cent. as against a loss of 8.7 per cent. in the previous year. In the marine account, though the premiums are down by about £20,000, the department has been able to transfer £25,000 to the profit and loss account. The marine fund stands at the high level of £176,000 or nearly 175 per cent. of the premium income.

The total assets as shown in the balance sheet amount to £10.602 million representing an increase of £271,000. The dividend paid to the shareholders was 15sh. per share of £1 paid-up, less tax.

Life Account.

(In thousands of £)

	1931	1932	1933
New Business—			
Number of Policies ...	1,877	1,887	1,956
Sum assured ...	1,197	1,239	1,472
Premiums on new business	65	84	76
Total Premium Income	538	558	557
Interest	305	286	265
Claims by death ...	278	276	225
Claims by maturity ...	231	195	197
Commission and Expenses	87	85	88
Life, Annuity and Contingency Fund at beginning of year ...	6,884	7,028	7,225
Life, Annuity and Contingency Fund at year-end	7,028	7,225	7,378
Increase in Fund ...	144	197	153
Ratio of expenses to Premium	16.1'		15.7%

Fire Account.

	1931	1932	1933
Premiums	834	809	740
Claims	...	451	377
Expenses	...	360	347
Reserve at 40% of Premium ...	334	324	296
Additional reserve ...	500	500	500
Total reserve ...	834	824	796
Ratio of claims to Premium	54.3%	54.5%	51.0%
Ratio of expenses to Premium	46.2%	44.4%	46.9%
Ratio of reserve to Premium	100%	101.8%	107.6%

Accident Account.

	1931	1932	1933
Premiums	9	11	12
Claims	...	4	7
Expenses	...	4	5
Reserve at 40% of Premium ...	4	4	5
Additional reserve ...	5	8	7
Total reserve ...	9	12	12
Ratio of claims to Premium	37.7%	36.4%	56.3%
Ratio of expenses to Premium	42.2%	36.4%	48.1%
Ratio of reserve to Premium	100%	109%	100%

Employers' Liability Account.

Premiums	41	38	38
Claims	23	25	20
Expenses	15	14	14
Reserve at 40% of Premium	...	15	14
Additional reserve ...	...	59	58
Total reserve ...	74	74	72
Ratio of claims to Premium	56.1%	65.7%	57.2%
Ratio of expenses to Premium	37.7%	37%	38.5%
Ratio of reserve to Premium	180%	195%	200%

Marine Account.

Premiums	124	122	101
Claims	26	35	23
Expenses	7	7	8
Reserve	197	187	176
Ratio of claims to Premium	20.7%	28.9%	23.0%
Ratio of reserve to Premium	159%	153%	174.3%

General and Motor Insurance Account.

Premiums	396	447	400
Claims	229	318	247
Expenses	170	192	168
Reserve at 40% of Premium	158	...	160
Additional reserve ...	165	...	145
Total reserve ...	323	...	305
Ratio of claims to Premium	57.8%	71.1%	61.8%
Ratio of expenses to Premium	42.9%	43.2%	42%
Ratio of reserve to Premium	81.5%	...	76%

Balance Sheet Including Life Department

Liabilities—	1932	1933
Capital	155	155
Life Insurance, Annuity and Contingency Fund ...	7,225	7,491
Fire Insurance Fund ...	824	796
Accident Insurance Fund ...	12	12
Employers' Liability Insurance Fund	74	72
Annuities certain and leasehold Redemption Fund ...	98	162
General Insurance Fund ...	310	305
Marine Insurance Fund ...	187	176
General Reserve Fund ...	500	500
Staff Insurance and Pension Fund	105	110
Total funds	9,835	9,624
Other items	841	824
Total ...	10,331	10,603

Assets—		
Giltedge ...	3,833	1,376
Debenture and preference shares	2,851	896
Equity shares	847	84
Mortgages and loans ...	1,468	4
Other investments and other items	1,165	481
Cash	167	270
Life Assets	...	7,491
Total	10,331	10,602

Profit and Loss Account.

Receipts—	1932	1933
Brought in	142	100
Transferred from—		
Life account	...	87
Fire account	44	82
Accident	...	...
Marine	25	25
Employers' Liability Account	...	4
General Insurance Account ...	...	15
Other items	36	23
Total ...	247	236
Disbursements—		
Dividend amount	87	...
Allocations	5	...
Other items	55	39
Carried forward	100	247
Total ...	247	286

THE COMMERCIAL UNION ASSURANCE CO., LTD.

(Established 1861).

Head Office: LONDON.

Bombay Office: 9, WALLACE ST., FORT.

Calcutta : 32, DALHOUSIE SQUARE.

The Commercial Union Assurance Company is one of the biggest composite insurance companies of not only the United Kingdom but of the whole world. It transacts immense volume of insurance business of a wide range of varieties in almost all parts of the world. In fire and accident insurance business, Commercial Union has been topping the list of all the British companies for the past ten years and more. The gigantic size of the company can well be gauged by the fact that its paid-up capital amounts to £3.54 million, its general reserve fund amounts to £3.83 million, that its total premium income from all departments for the year 1933 amounts to more than £15 million and its total assets exceed £60 million. The Commercial Union controls, as its name implies, important subsidiary companies like the "Ocean Accident," the "Union," the "British General," the "West of Scotland," the "Edinburgh," the "Hand in Hand" and the "Palatine." Some of these subsidiary companies are very old and powerful by themselves.

The new business of the life department has decreased slightly to £3.931 million while the total net premium income has appreciated by £114,000 to £1.771 million. The expense ratio continues to be kept at the low figure of 12.5 per cent. The life fund

has been increased by nearly £1 million to £21.566 million. The fire account shows a premium income of £5.417 million being a decrease of £602,000 compared with the 1932 figure. The fire losses have decreased considerably by 8.1 per cent. and consequently the company has been able to show a profit of £391,000 or 7.2 per cent. of the premium income as against a small loss in the previous year. The reserves of the department at the end of the year stand at £6.925 million or 128 per cent. The accident department which is the largest of its general branches, reveals a small decrease in the premium income which stands at £6.940 million. The profits of the department amounts to £178,000 or 2½ per cent. of the premium income. The reserves amount to £5.348 million. In the marine department continuous strengthening of the reserves is being carried on and the marine fund at £1.180 million, is 220 per cent. of the premium income as against 204 per cent. last year. The regular profit margins of this department are also noteworthy, the profit of the year being £150,000.

Life Account.

New Business—

	(In Thousands of £)		
	1931	1932	1933
Number of policies in Life Department ...	6,997	7,246	6,990
Amount assured in Life Department ...	4,034	3,986	3,931
New premiums in Life Department ...	239	224	292
Total premiums in Life Department ...	1,637	1,657	1,771
Interest from Life Department ...	805	846	816
Claims from Life Department ...	993	1,040	1,054
Commission and expenses of Life Department ...	200	207	222
Fund of Life Department at beginning of year	18,201	19,267	20,601
Fund of Life Department at year-end ...	19,267	20,601	21,566
Increase in fund ...	1,066	1,334	965
Ratio of expense to premium n Life Department ...	12.2%	12.4%	12.5%

Fire Account.

Premiums	6,316	6,018	5,417
Claims	3,448	3,264	2,498
Expenses	3,010	2,923	2,557
Reserve at 40% for unexpired risks ...	2,526	2,407	2,167
Additional reserve ...	4,572	4,517	4,759
Total reserves ...	7,099	6,925	6,926
Ratio of claims to Premium ...	55%	54.2%	46.1%
Ratio of expense to Premium ...	48%	48.5%	47.1%
Ratio of reserve to Premium ...	112%	115%	127.8%

Marine Account.

Premiums ...	734	587	534
Claims	329	318	253
Expenses	151	164	152
Reserve ...	1,247	1,202	1,180
Ratio of claims to Premium	45%	54.1%	47.4%
Ratio of expenses to Premium	21%	27.9%	28.7%
Ratio of reserve to Premium	170%	204.7%	221.0%

Accident Account.

Premiums	7,846	7,161	6,940
Claims	4,980	4,128	3,824
Expenses	3,301	3,114	3,024
Reserve	5,578	5,346	5,348
Ratio of claims to Premium	63%	57.6%	55.1%
Ratio of expenses to Premium	43%	43.5%	43.6%
Ratio of reserve to Premium	71%	75%	77.1%

Consolidated Balance Sheet.

Liabilities—			
Capital ...	3,540	3,540	3,540
Debentures	2,279	2,279	1,470
General reserve fund	4,261	4,267	3,834
Funds—			
Fire ...	7,099	6,925	6,926
Marine ...	1,247	1,202	1,180
Accident ...	5,578	5,346	5,348
Life ...	28,027	29,203	21,566
Total funds	46,528	46,943	38,854
Other items	8,605	8,083	16,262
Total	60,952	60,845	60,126
Assets—			
Giltedge securities ...	24,838	19,891	10,312
Debentures and preference shares ...	14,457	13,462	9,380
Equity shares ...	621	922	546
Mortgages and Loans	5,974	5,790	694
Loans on life policies	3,392	1,708	...
Life Assets ...	...	...	30,077
Other investments and other items ...	8,598	15,584	6,336
Cash	3,072	3,488	2,780
Total	60,952	60,845	60,125

Profit and Loss Account.

Receipts—			
Brought forward ...	574	558	562
Transferred from			
Fire account ...	250	150	150
Marine account ...	200	150	150
Accident account ...	...	...	90
Life account ...	33	36	35
Interests, dividends and rents ...	1,030	965	899
Other items ...	153	58	66
Total ...	2,240	1,917	1,952
Disbursements—			
Dividend rate per cent.	41	41	41
Dividend amount ...	1,118	1,110	1,116
Allocations ...	257	20	40
Other items ...	307	780	209
Carried forward ...	558	562	587
Total	2,240	1,917	1,952

THE GENERAL ACCIDENT, FIRE, & LIFE ASSURANCE CORPORATION, LTD.

(Established 1885)

Head Office: London

Calcutta Office : 8, HARE STREET.

The General Accident, Fire and Life Assurance Corporation is one of the leading composite insurance companies of the United Kingdom. For its age, the progress achieved by the Corporation, particulary by its accident and general branch (which is the largest of all its departments, covering every class of casualty business at home and abroad) must be considered truly remarkable. The total premiums for the year 1933, from all its branches exceed £7 million and the total assets at the end of the year exceed £14 million. Except an insignificant fall in the marine premium income, other premium incomes have appreciated during the year under review. This is indeed creditable at a time when most other big composite offices have suffered set backs in the premium incomes of the general branches of insurance.

The new business of the life branch has been increasing steadily year after year and during the year 1933 it amounted to £2.309 million showing a rise of £210,000. The life fund at the end of the year stands at £3.784 million.

The accident and general account premiums have risen by £160,000 to £6.392 million. The losses experienced are slightly heavier than in the last year, particularly in the home automobile section with the result that underwriting profits of the department at £87,000 has decreased from 3.6 per cent. to 1.4 per cent. of the premium income. The accidents fund is kept at £5.488 milion or 85.7 per cent. of the premium income.

The notable feature in the workings of the fire department is the big drop of 11.7 per cent. in the fire losses of the year and the consequent release of a much higher percentage (17.4 per cent.) of trading profits. The fire premiums at £549,000 was nearly the same as in 1932. The total reserves of the department are kept at £489,000 or 89 per cent. of the premium income.

The marine account shows a small decrease of £17,000 in the premium income which amounts to £138,000. The profits released amount to £15,000 and the marine fund stands at £134,000 or 111 per cent. of the premium income.

The profit and loss account shows a total available sum of £1.059 million including the balance of £598,000 brought forward from last year's accounts. Afer paying dividends to the shareholders and other allocations a sum of £599,000 is carried forward unappropriated. The Corporation's total assets amount to £10.059 million and the combined assets of the whole group stand at £14.073 million.

Accident Accounts.

(£000's omitted)

	1931.	1932.	1933.
Premiums ...	6,688	6,231	6,392
Claims	4,042	3,802	3,748
Commission and Expenses	2,375	2,274	2,331
40% Reserve ...	2,316	2,312	2,387
Additional Reserve ...	3,017	2,950	3,101
Total Reserve ...	5,333	5,262	5,488
Ratio of Claims to Premiums ...	60.4%	61%	58.6
Ratio of Expenses to Premiums ...	35.5%	36.5%	36.5%
Ratio of Reserves to Premiums ...	79.7%	84.5%	85.9%

Life Account.

	1931.	1932.	1933.
New Business—			
Amount	2,099	1,864	2,309
Total Premiums ...	406	420	492
Claims	289	236	314
Expenses and Commission	98	90	101
Life Fund at the beginning of the year	3,489	3,368	3,589
Life Fund at the end of the year ...	3,368	3,589	3,784
Increase in the Life Fund	–121	221	195

Fire Account.

	1931.	1932.	1933.
Premiums ...	602	549	549
Claims	287	286	222
Expenses and Commission ...	245	229	231
40% for unexpired risks	241	220	220
Additional Reserves	278	279	269
Total Reserve ...	519	499	489
Percentage of Claims to Premiums ...	48	52%	40.4%
Percentage of Expenses to Premiums	41	42%	42%
Percentage of Reserves to Premiums	86	91%	89%

Marine Account.

	1931.	1932.	1933.
Premiums ...	86	138	121
Claims	69	89	88
Expenses	8	12	12
Reserves	90	126	134
Percentage of Claims to Premiums ...	80	64	73%
Percentage of Expenses to Premiums	9	9	10%
Percentage of Reserves to Premiums	101	91	111%

Balance Sheet.

Liabilities—

Capital	688	688	688
Life and Annuity Fund	3,368	3,589	3,784
Fire Fund ...	519	499	489
Accident and General Insurance Fund ...	5,333	5,262	5,488
Marine Fund ...	90	126	134
Investment Reserve Fund	775	775	925
General Reserve Fund	600	750	750
Total Funds ...	10,685	12,667	11,570
Other Liabilities ...	1,946	913	1,815
Total ...	13,319	13,580	14,073

Assets—

Giltedge	3,215	3,299	3,167
Debentures and Preference Stocks ...	4,117	4,400	4,808
Equity Stocks . .	4,117	4,400	4,808
Equity Shares ...	855	873	860
Mortgages and Loans	1,234	1,257	1,209
Free-hold and Lease-hold Properties ...	1,380	,430	235
Outstanding Premiums and Agency Balances	1,284	1,120	1,133
Other Assets ...	1,234	1,201	2,661
Total	13,319	13,580	14,073

Profit & Loss Account.

Receipts—

Brought Forward ...	387	474	489
Interest, Dividends and Rents ...	247	243	245
Transferred from Fire Account	74	55	95
Transferred from Accident and General Account ...	174	225	87
Other Items ...	8	17	143
Total ...	890	1,014	1,059

Disbursements—

Dividend			
Rate %	56	56	56
Amount	193	193	193
Allocations	43	260	160
Carried Forward	474	489	599
Other Items	180	72	107
Total	890	1,014	1,059

GUARDIAN ASSURANCE CO., LTD.

Head Office : LONDON.

Indian Office : 8, CLIVE ROW, CALCUTTA.

Established as long ago as in 1821 this company transacts all kinds of insurance business. Associated with the Guardian are: (1) Guardian Insurance Company of Canada ; (2) Reliance Marine Insurance Company, Ltd.; (3) Guardian Eastern Insurance Company, Ltd.; (4) Scottish Plate Glass Insurance Company, Ltd.; and (5) Hibernian Fire and General Insurance Company, Ltd.

The accounts also include the transactions of the Albingia Versicherungs Aktiengesellschaft of Hamburg, most of the share capital of which company has been acquired by the "Guardian" during 1932. The number and amount of the claims have both been below the expectation, and there has been a profit from mortality. The total number of policies in force at the end of 1933, was 26,794 assuring, with bonuses, £20,515,080. The funds of the Life department at the same date amounted to £7,159,501.

Dividend for 1933 was maintained at the rate of 10s. per ordinary share (10s. paid-up) and 10s. on each staff share, both subject to income-tax.

Total funds amount to £11.6 million and total resources to £14.7 million.

Life Account.

New Business—

(In thousands of £)

	1932.	1933.
No. of Policies	1,902	1,955
Sum assured	1,648	1,548
Premiums on new business ...	146	99
Total Premium	606	611
Claims and annuities ...	454	450
Expenses and commission ...	84	84
Life Fund at beginning of year	6,722	7,063
Life Fund at year-end ...	7,063	7,422
Net increase in Life Fund ...	341	359
Ratio of expenses to premium	13.9%	13.7%

Fire Account.

Premiums	1,193	1,277
Claims	562	640
Expenses	536	575
Reserve for unexpired risks	597	597
Additional reserves ...	1,047	1,047
Total Reserve ...	1,644	1,644
Ratio of claims to premium ...	47.1%	50.1%
,, ,, expenses to premium	45.0%	45.0%
,, ,, reserve to premium	137.8%	128.9%

Accident, Burglary and General Account.

Premiums	1,196	1,110
Claims	595	582
Expenses	541	524
Reserve for unexpired risks	538	500
Additional reserve ...	395	405
Total Reserve ...	933	905
Ratio of claims to premiums	50.0%	52.4%
,, ,, expenses to premiums	45.2%	47.2%
,, ,, reserve to premiums	78.0%	81.5%

Marine Account.

Premiums	256	252
Claims	201	53
Expenses	69	71
Reserve	465	453
Ratio of claims to premiums	78.5%	21.0%
,, ,, expenses to premiums	27.0%	28.2%
,, ,, reserve to premiums	181.6%	180%

Balance Sheet as at 31st December.

Liabilities—	1932	1933
Capital	1,025	1,025
Funds—		
Life	7,056	7,422
Fire	1,644	1,686
Accident, Burglary and General	933	905
Marine	465	453
Redemption Assurance Fund	230	446
General reserve	182	182
Total funds	12,230	11,570
Other items	2,039	2,118
Total ...	14,269	14,713

Assets—	1932	1933
Giltedge securities ...	3,484	5,317
Debentures and Preference shares	2,428	2,863
Equity shares	463	525
Loans on life policies ...	375	360
Other loans and mortgages ...	3,197	2,312
Other items	3,754	2,766
Cash	568	570
Total ...	14,269	14,713

Profit and Loss Account.

Receipts—		
Brought in	17	18
Transferred from—		
Fire account	125	46
Life account	...	...
General and Accident account	65	89
Marine account	9	31
Other items	306	160
Total ...	522	344
Disbursements—		
Dividend amount ...	197	200
Allocations	...	...
Other items	307	130
Carry forward	18	14
Total ...	522	344

THE LIVERPOOL AND LONDON AND GLOBE INSURANCE CO., LTD.

Head Office: 1, Dale Street, Liverpool.

Established in 1836, this Company transacts extensive business in all parts of the Globe. It is associated with the Royal Insurance Company, Limited and also controls a number of subsidiary Companies.

The profit earnings of the Company continue to be satisfactory. New life business registered an increase of £100,000. The Fire Insurance Account showed a net premium income of £3.9 million and a profit of £370,445 which was carried to Profit and Loss Account. The Reserve Fund in this Department is equivalent to 85.1% of the premium income. The Miscellaneous Insurance Account showed a loss of £46,696 in 1933 as against a loss of £123,000 in the previous year, and maintains a reserve equivalent to 130.4 per cent. of the premiums which shows an increase of 8.4 per cent. over 1932. The Marine Account has a reserve in respect of unexpired risks equivalent to 145.3% of the premiums. The Interest Earnings, amounted to about £829,000. Omitting the carry forward of £545,871 to the next account, the balance of profit available for distribution after all allocations for expenses during 1933 was £825,917. A dividend of 27s. per share less income tax was paid in 1933 which is the same rate as in 1932.

The Company's position continues strong with total funds amounting to £26 millions out of the total assets of £29.6 millions.

The principal classes of business transacted in India are Fire, Motor Vehicle and other classes of Miscellaneous Accident business including Workman's Compensation, also Life and Marine business.

Life Account.

(In thousands of £)

New Business—	1931	1932	1933
Number of policies ...	3,815	3,801	3,592
Amount ...	1,950	2,069	2,169
New premiums ...	107	124	127
Total premiums ...	782	819	849
Claims ...	431	539	575
Interest ...	380	389	390
Commission and expense	82	88	85
Funds at beginning of the year ...	8,921	9,472	9,954
Funds at year-end ...	9,472	9,954	10,316
Increase ...	551	482	362
Ratio of expenses to premium ...	10.5%	10.7%	10.0%
Annuity fund ...	591	708	

Fire Account.

	1931	1932	1933
Premiums ...	4,481	4,095	3,931
Claims ...	2,168	2,060	1,779
Expenses ...	2,161	1,955	1,831
Reserve at 40% of premium ...	1,792	1,638	
Additional reserve ...	1,775	1,775	1,775
Total reserve ...	3,567	3,413	3,347
Ratio of claims to premium ...	48.4%	47.7%	45.3%
Ratio of expenses to premium ...	48.2%	50%	46.7%
Ratio of reserve to premium ...	80%	83.3%	85.1%

Marine Account.

	1931	1932	1933
Premiums ...	323	295	285
Claims ...	259	243	230
Expenses ...	35	35	32
Reserve at 40% of premium ...	129	118	114
Additional reserve ...	300	300	300
Total reserve ...	429	418	414
Ratio of claims to premium ...	80.2%	82.4%	80.7%
Ratio of expenses to premium ...	10.8%	11.9%	11.2%
Ratio of reserve to premium ...	133%	142%	145.3%

Miscellaneous Account.

	1932.	1933.
Premiums	4,859	4,635
Claims	3,392	2,835
Expenses	1,885	1,754
Reserve at 40% of premium	1,944	1,854
Additional reserve including liability in respect of outstanding claims ...	4,006	4,188
Total reserve ...	5,950	6,043
Ratio of claims to premium ...	69.8%	61.2%
Ratio of expense to premium ...	38.8%	37.8%
Ratio of reserve to premimn ...	122%	130.4%

Balance Sheet.

Liabilities—	1931	1932	1933
Capital ...	1,062	1,062	1,062
4% Perpetual Debenture Stock ...	550	550	550
4% "Thames and Mersey" Debenture Stock	372	371	371
Funds, fire ...	3,567	3,413	3,347
Funds, life ...	9,472	9,954	10,316
Annuity fund ...	591	708	741
Leasehold Redemption Fund ...	148	172	200
Marine Reserve Fund ...	429	418	414
Miscellaneous Insurance Reserve fund ...	6,246	5,950	6,043
General Contingencies Fund ...	2,684	2,700	2,513
Members Life Profits Account ...	22	23	97
Other funds ...	692	730	752
Total funds ...	23,851	24,068	24,423
Other items ...	3,097	2,950	3,237
Total ...	28,932	29,001	29,643
Assets—			
Giltedge ...	10,141	10,155	13,817
Debenture and Preference shares ...	10,037	9,970	8,568
Equity shares ...	1,465	1,362	1,225
Mortgages and loans ...	1,834	1,663	1,717
Other investments and other items ...	3,915	3,619	3,528
Cash ...	1,540	2,232	788
Total ...	28,932	29,001	29,643

Profit and Loss Account.

Receipts—			
Brought in ...	574	572	534
Transferred from fire account ...	229	234	370
Transferred from members Life profits account ...	23	23	26
Transferred from Marine account ...	42	28	27
Transferred from personal Accident account	...	...	...
Transferred from employers' liability account ...	...	...	...
Interest ...	520	473	405
Miscellaneous insurance account ...	−75	−123	−47
Other items ...	...	68	...
Total	1,313	1,275	1,316
Disbursements—			
Dividend amount ...	542	842	551
Allocations ...	70	70	70
Other items ...	129	129	149
Carry forward ...	572	534	546
Total	1,313	1,275	1,316

THE LONDON ASSURANCE CORPORATION.

(Established 1720).

Head Office : LONDON.

Calcutta Office: CLIVE BUILDINGS, CLIVE STREET.

The Corporation is one of the few oldest insurance companies of England, transacting all forms of insurance business having its branches spread over a large part of the globe. The total premium income of the Corporation from all departments exceded £4½ millions during the year 1933 and the total assets at the end of the year stood at nearly £16 million.

The new business of the life department at £2.306 million has made a further advance of £136,000 and this is a record in the history of the Corporation. The total premium income amounted to £692,000 and the net interest income to £288,000 which is slightly lower than that of the last year, the interest rate earned having fallen down to 4.0 per cent. from 4.4 per cent. in 1932. The life fund has been substantially increased by £535,000 to £7.658 million.

The fire premiums declined by £516,000 to £2.033 million but the improvement in the claims ratio from 57.1 per cent. in 1932 to 50.7 per cent. in the year under review, has enabled the Corporation to release a profit of £93,000 or 4.6 per cent. of the premium income as against a loss of 1.3 per cent. incurred in the previous year. The total reserves of the department are kept at 85 per cent. of the premium income.

The accident premiums at £1.133 million register a fall of £90,000 compared to last year but here also an improvement of 4 per cent. in the claims paid has increased considerably the underwriting profits. The marine account has been further strengthened and the reserves of the department stand at 125 per cent. of the premium income.

The profit and loss account shows a total profit transfer of £448,000 from all the departments and including the balance brought forward from last year's account and the interest not credited to other accounts, the

total available sum amounted to £914,000. After payment of dividends and other allocations, a sum of £386,000 was carried forward to the next year.

Life Account.

(In thousands of £)

New Business—	1931.	1932	1933.
Number of policies ...	2,299	2,522	2,726
Amount ...	1,796	2,170	2,306
Premiums on New Business ...	83	116	99
Total Premiums ...	626	683	692
Interest ...	285	297	288
Claims and annuities	390	398	373
Commission and expenses	100	99	103
Life fund at beginning of the year ...	6,401	6,677	7,123
Life fund at year-end	6,677	7,123	7,658
Increase in fund ...	275	446	535
Ratio of expenses to Premium ...	16.0%	14.4%	14.9%

Fire Account.

Premiums	1,988	2,549	2,033
Claims	1,083	1,456	1,031
Expenses	918	1,191	950
Reserve at 40% ...	795	1,020	813
Additional reserve ...	900	905	915
Total reserve ...	1,695	1,925	1,728
Ratio of claims to Premium ...	54.5%	57.1%	50.7%
Ratio of expenses to Premium ...	46.2%	46.7%	46.7%
Ratio of reserve to Premium ...	85%	75.5%	85 %

Marine Account.

Premiums	879	950	673
Claims	743	653	530
Expenses	109	115	127
Reserve	902	986	841
Ratio of claims to Premium ...	84.5%	68.7%	78.8%
Ratio of expenses to Premium ...	12.4%	12.1%	18.9%
Ratio of reserve to Premium ...	102%	103.7%	125%

General Accident Account.

Premiums	1,191	1,223	1,133
Claims	877	782	679
Expenses	337	434	415
Reserve	600	641	613
Ratio of claims to Premium	73.6%	63.1%	59.9%
Ratio of expenses to Premium	28.2%	35.6%	36.6%
Ratio of reserve to Premium	50%	52.4%	54.1%

Balance Sheet.

Liabilities—			
Capital	912	912	912
Funds :—			
„ Life	6,677	7,123	7,658
„ Fire	1,695	1,925	1,728
„ Marine ...	902	986	841
„ General accident	...	641	613
„ Capital and leasehold redemption fund ...	410	482	514
General reserve fund	1,460	1,460	1,535
Total funds ...	11,744	12,617	12,889
Other items ...	1,734	2,224	672
Total ...	14,390	15,753	14,473
Assets—			
Giltedge	4,666	6,083	6,696
Debentures and Preference shares ...	2,793	2,924	3,201
Equity shares ...	514	344	332
Mortages and loans ...	2,300	1,845	1,541
Other investments and other items ...	3,869	4,100	3,680
Cash	248	457	494
Total ...	14,390	15,753	15,944

Profit and Loss Account.

Receipts—			
Brought in ...	318	363	365
Transferred from life account ...	20	20	20
Transferred from fire account ...	89	27	147
Transferred from marine ...	159	171	193
Other items ...	186	171	189
Total ...	772	752	914
Disbursements—			
Dividend amount	236	324	235
Allocations	135	50	115
Other items	43	168	178
Carry forward	358	210	386
Total	772	752	914

THE LONDON AND LANCASHIRE INSURANCE COMPANY, LTD.

(Established 1861).

Head Office : London.

Calcutta Office : 2, Fairlie Place.

Bombay Office : 15, Elphinstone Circle.

The London and Lancashire is now one of the largest of the composite British

Insurance Companies and has absorbed a large number of subsidiary companies not only in the United Kingdom but also abroad. There are as many as five in the United Kingdom, three in U. S. A., five in Canada, six in Australia and one each in Holland, South America and South Africa. It transacts in its own name all classes of business with the exception of life which is carried on, in the name of "Law Union and Roch" a company acquired in 1919. In India it transacts only the general branches of insurance.

The results of the company for the year 1933, like many other big composite offices, experienced a fall in the premium income of the general branches of insurance. The premium income of all the three departments fire, accident and marine, have suffered slight decreases compared with the results of the previous year. The chairman Mr. F. W. Pascoe Rutter pointed out that the reduction of the premium income is chiefly due to the deterioration of the exchanges of other countries in comparison with the pound sterling. Considering this important factor and the world wide trade depression which has affected almost all kinds of business, it must be said that the results of the London and Lancashire are very satisfactory. The combined premium income of all the three departments amounted to £5.540 million having suffered a fall of £458,000 compared with the last year's figure. But the trading profits have substantially increased to £587,000 (or 10.6 per cent.) from 439,000 in 1932.

The new business of the life section at £2.365 million shows a slight increase over the last year's figure. The life fund at the end of the year stands at £10.979 million. Though the premiums in the fire and accident departments have declined, it is noteworthy that the underwriting profits have substantially increased in both the sections, owing the lower claims ratio. Thus the fire account trading profits have increased from 11 to 15 per cent. of the premium income and the accident account shows a profit of 2.3 per cent. as against a loss of 2 per cent. in the previous years. Generous reserves are provided for in each section ; 123 per cent. of the premium income in the fire department, 82 per cent. of the premium income in the accident department and 145 per cent. of the premium income in the marine department.

New Business—

(In Thousands of £)

	1931.	1932.	1933.
Amount assured ...	2,049	2,298	2,365
Premiums on new business ...	63	100	64
Total premium income	699	723	695
Interest	471	417	483
Claims by death ...	457	380	357
Claims by maturity ...	287	330	323
Commission and expenses	115	121	122
Life Fund at beginning of the year ...	10,880	10,716	10,791
Life Fund at year-end	10,716	10,791	10,979
Increase	−164	+75	+188
Ratio of expenses to premium ...	16.4%	16.7%	17.6%

Fire Account.

Premium	3,040	2,872	2,768
Claims	1,417	1,312	1,109
Expenses	1,287	1,310	1,220
Reserve for unexpired risks	1,216	1,149	1,108
Additional reserve ...	2,400	2,400	2,400
Total reserve ...	3,616	3,549	3,508
Ratio of claims to premium ...	46.6%	45.7%	40.1%
Ratio of expenses to premium ...	42.3%	45.6%	44.1%
Ratio of reserve to premium ...	118.9%	123.6%	123.1%

Accident and General Account.

Premium	2,197	2,023	1,912
Claims	1,269	1,252	1,072
Expenses	891	871	824
Reserve for unexpired risks ...	.. 879	810	765
Additional reserve ...	800	800	800
Total reserve ...	1,679	1,610	1,565
Ratio of claims to premium ...	57.7%	61.3%	56.1%
Ratio of expenses to premium ...	40.5%	43.1%	43.1%
Ratio of reserve to premium ...	76.4%	79.6%	81.8%

Marine Account.

Premium	1,296	1,102	858
Claims	884	831	645
Expenses	150	189	144
Reserve for unexpired risks	519	441	343
Additional reserve ...	900	900	900
Total reserve ...	1,419	1,341	1,243
Ratio of claims to premium ...	68.2%	75.4%	75.1%
Ratio of expenses to premium ...	11.5%	17.1%	16.8%
Ratio of reserve to premium ...	109.4%	121.7%	144.9%

Balance Sheet.

Liabilities—			
Capital	1,456	1,456	1,456
5% Debenture Stock	618	611	...
Reserve Fund ...	1,500	1,500	1,500
Fire Fund ...	3,616	3,549	3,508
Marine Fund ...	1,419	1,341	1,244
Accident Fund ...	1,679	1,610	1,565
Staff Pension Fund ...	309	323	333
Life Assurance Fund	10,716	10,791	10,979
Total funds ...	19,239	19,114	19,129
Balance of Profit and Loss account ...	1,511	1,738	2,130
Claims and balances outstanding ...	4,071	4,289	4,096
Other items ...	463	241	223
Total	27,358	27,449	27,034
Assets—			
Buildings ...	1,678	1,637	1,188
Giltedge ...	9,911	8,386	10,903
Debentures and Preference shares ...	4,505	5,221	7,403
Mortgages and loans	4,311	3,915	3,668
Other Investments	2,364	5,432	1,591
Cash	4,589	2,858	2,281
Total ...	27,358	27,449	27,034

Profit & Loss Account.

	1931.	1932.	1933.
Receipts—			
Brought in ...	1,354	1,511	1,738
Underwriting profit from Fire Account	345	316	414
Underwriting profit from Marine Account	201	160	128
Underwriting profit from Accident and General Account ...	78	Nil.	44
Underwriting profit from Fixed Term Assurance Account	2	5	...
Life profits ...	32	32	32
Interest	502	509	490
Total ...	2,514	2,533	2,847
Disbursements—			
Dividend amount ...	560	569	570
Allocations ...	443	226	147
Other items ...	...	Nil.	Nil
Carried forward ...	1,511	1,738	2,130
Total ...	2,514	2,533	2,847

NORTH BRITISH & MERCANTILE INSURANCE COMPANY.

(Established 1809)

Head Office : EDINBURGH AND LONDON.

Calcutta Office : 101/1, CLIVE STREET.

Bombay Office : 276, HORNBY ROAD.

The North British & Mercantile Insurance Company is one of the oldest Scottish insurance companies and with its world-wide organisation doing splendid business, it can easily be classed among the most powerful of British insurance companies. The company has during recent years acquired important subsidiary companies. The parent company "North British & Mercantile" transacts only the two most important branches of insurance, namely, life and fire insurance ; accident business is done by "Railway Passengers Assurance Company;" marine business by "Ocean Marine Insurance Company" and all other classes of business by "Fine Art and General Insurance Company". The accounts for the year 1933 show that the company has completed an year of exceptionally good results and that most of the figures compare favourably with those of the previous year. The aggregate premium income of all the departments and subsidiary companies amounts to the huge sum of £8.407 million and the interest income to nearly £2 million. The total assets stand at nearly £49 million.

The new business of the life department at 8,709 policies and £4.603 million compare favourably with 7,639 policies and £3.993 million in 1932. The total premium income amounts to £2.319 million and the considerations received for annuities exceed £1 million. The life fund was increased by £1.187 million to £28.882 million, and the annuity fund has appreciated by £ 748,000 to £5.934 million. It is noteworthy that the expense ratio is steadily decreasing and stands at 16.2 per cent. during the year 1933.

The fire premiums at £3.301 million have appreciated slightly. Though the premium income of this department is still far below its previous high levels, to record an increase over the last year's figure in these difficult times is an achievement which only a few of the larger offices can boast of. The fire losses have substantially decreased by 8 per cent. and underwriting profits have increased by 3½ per cent. to 10 per cent. The reserves are kept at £3.320 million or slightly more than 100 per cent. of the premium income.

The accident premiums as shown by the "Railway Passengers" account have decreased slightly to £1.083 million, but the profits are kept at the usual high level being 11.8 per cent. of the premium income. The funds stand at £901,000 and the total separate assets of this company amount to £2.888 million. The premium incomes of the other two accounts also have decreased slightly, but the profit-earning capacity is kept up.

Life Account.

(In Thousands of £)

	1931.	1932.	1933.
New Business—			
Number	8,024	7,639	8,709
Amount	3,817	3,993	4,603
Premium on New Business ...	195	224	332
Total Premium ...	2,136	2,189	2,319
Interest	1,158	1,186	1,173
Claims by Death ...	948	914	899
,, ,, Maturity ...	614	654	742
Commission and Expenses	366	366	376
Life fund at beginning of year	26,066	26,604	27,695
Life fund at year-end	26,604	27,695	28,882
Increase in fund ...	538	1,091	1,187
Ratio of Expenses to Premium ...	17.1%	16.7%	16.2%
Annuity fund ...	3,768	5,186	5,934

Fire Account.

Premiums ...	3,628	3,277	3,301
Claims	1,828	1,706	1,459
Expenses	1,662	1,498	1,512
Reserve at 40% for unexpired risks ...	1,451	1,311	1,320
Additional reserve ...	2,000	2,000	2,000
Total reserve ...	3,451	3,311	3,320
Ratio of Claims to Premium ...	50.4%	52.0%	44.2%
Ratio of Expenses to Premium ...	45.8%	45.7%	45.8%
Ratio of Reserve to Premium ...	95.1%	101%	100.6%

"Ocean Marine" Account.

Premiums ...	290	252	214
Claims	222	189	112
Expenses	33	32	31
Reserve	273	93	71
Ratio of Claims to Premium ...	76.6%	75%	52%
Ratio of Expenses to Premium ...	11.4%	12.6%	14.4
Ratio of Reserve to Premium ...	94%	...	...

Fine Art and General Account.

Premiums ...	340	327	319
Claims	163	158	154
Expenses	142	140	138
40% Reserve ...	136	131	128
Additional Reserve ...	200	200	200
Total Reserve ...	336	331	328
Ratio of Claims to Premium ...	48%	48.3%	48.3%
Ratio of Expenses to Premium ...	41.8%	42.8%	43.3%
Ratio of Reserve to Premium ...	99%	101.2%	102.8%

"Railway Passengers" Account.

Premiums ...	1,155	1,108	1,083
Claims	532	538	509
Expenses	472	463	456
Reserve at 40% ...	462	443	433
Additional Reserve ...	493	465	468
Total Reserve ...	955	908	901
Ratio of Claims to Premium ...	46.0%	48.5%	47%
Ratio of Expenses to Premium ...	40.8%	41.8%	42.1%
Ratio of Reserve to Premium ...	82.7%	81.9%	83.2%

Balance Sheet.

Liabilities—			
Capital	2,438	2,438	2,438
Funds of Life ...	26,604	27,695	28,882
,, ,, Fire ...	3,451	3,311	3,320
Sinking fund ...	264	311	474
Other funds ...	1,435	6,727	7,414
Total funds ...	31,754	38,044	40,090
Other items ...	9,792	5,082	6,317
Total	43,984	45,564	48,845
Assets—			
Life and Annuity branches ...	31,117	33,703	35,654
Giltedge ...	4,714	3,756	5,291
Debentures and Preference Shares ...	2,865	1,435	2,459
Equity Shares ...	2,727	4,408	2,930
Mortgages and loans ...	3	3	5
Other investments and other items ...	1,946	1,789	2,117
Cash ...	612	470	389
Total	43,984	45,564	48,845

Profit & Loss Account.

Receipts—			
Brought in ...	3,468	3,173	3,127
Transfers from Fire account ...	246	214	321
Transfers from Life Annuity and Sinking Fund ...	...	...	...
Other items ...	509	501	714
Total	4,223	3,888	4,162
Disbursements—			
Dividend rate %	92%	92%	92%
,, Amount	539	532	532
Allocations	50	50	50
Other items	461	685	249
Carry forward	3,173	2,621	3,331
Total	4,223	3,888	4,162

NORWICH UNION LIFE INSURANCE SOCIETY.

(Established 1808)

Head Office : NORWICH.

Calcutta : GRAHAMS TRADING CO., LTD.

Post Box 147.

Norwich Union Life is one of the old and powerful Mutual Life Offices of England and it may also be mentioned that it is one of the few foreign life offices that has established a stronghold in Indian Life Insurance business. It has got a world-wide organisation and nearly 40 per cent. of its business is transacted outside United Kingdom. Its total Indian business in force amounts to the substantial sum of Rs. 8 crores nearly. In 1925 the society purchased from Phoenix the Norwich Union Fire Insurance Society. The

total income of the society during the year 1933 amounted to the substantial sum of £5.809 million and the total outgo to £3.798 million leaving a balance of more than £2 million to be utilised, increasing the total funds to £38.619 million.

The new business of the society increased by 1,688 policies and by £924,000 to 14,642 policies assuring a sum of £8.934 million. The total premium income amounted to £3.737 million and the net interest income to £1.566 million. The ratio of actual to expected death claims was only 61 per cent. and the expense ratio has slightly increased to 14.9 per cent. from 14.6 per cent. in the previous year. The life fund has advanced from £33.417 million in 1932 to £35.235 million. The total assets amount to £38.846 million.

The society thus leaves little to be desired either in its present position or current policy and can, therefore, be easily reckoned among the strongest and soundest life assurance companies of the British Empire.

Life and Annuity Account.

	1931.	1932.	1933
		(000 omitted £)	
Life Premium	3,492	3,601	3,737
Consideration for annuities ...	162	397	259
Interests and dividends	1,596	1,616	1,566
Net rate % earned on Funds ...	4-19-0	4-15-11	4-12-5
Claims (Life) ...	2,086	2,255	2,228
Annuities paid ...	140	150	177
Surrenders (Life) ...	630	733	680
Commission and expenses (Life) ...	511	506	558
Percentages of expenses to annual premiums	15.11	14.64	14.97
Percentage of new to Total premiums ...	14.52	14.78	16.5
Fund at the beginning of the year ..	32,297	32,966	35,065
Fund at the end of the year	32,966	35,065	37,032
Increase in the year ...	669	2,099	1,967
New Business—			
No. of policies ...	12,593	12,954	14,642
Net sums insured ...	8,250	8,010	8,934
Net new premiums ...	507	532	617
Capital Redemption Account :			
Premiums ...	219	120	111
Interest and dividends ...	53	54	54
Claims ...	34	39	47
Surrenders	33	162	68
Commission and expenses			
Fund at the end of the year	1,577	1,543	1,581

Total assets as per Balance Sheet for the year ended 31st December, 1933, amounted to £38,846,030, as against £36,838,719 in the previous year.

PEARL ASSURANCE CO., LTD.

(Established 1864).

Head Office: HIGH HOLBORN, LONDON.

Bombay: YORK BUILDING, HORNBY RD.

Calcutta : ANDREW YULE & CO., CLIVE ROW.

The "Pearl" is one of the biggest and soundest insurance companies of the United Kingdom. The annual report and accounts of the company for the year ending December 31, 1933 show the remarkable progress achieved by every department. Not only good trading profits are shown in each section but the premiums realised in all the sections have increased as compared with the results of the previous year. The total premium income from all the sources at £13.560 million have appreciated by £708,000 over the 1932 figure. The total assets at £80 million nearly, have been increased by £5½ million nearly.

The new business of the ordinary life department has increased by over £1 million to £8.762 million and the life fund at £34.123 million shows a substantial rise of £2 million. The annual valuation of the ordinary life assets and liabilities has revealed a surplus of £1.349 million out of which a simple reversionary bonus of £2 per cent. per annum has been granted to all the with-profit policyholders. The very low expense ratio of 10.1 per cent. of this department is noteworthy.

The industrial life section which is the biggest of the company shows a new business of over £20 million, and a premium income of £7.443 million. The fire premiums have considerably increased by £275,000 to £776,000 and the fire losses have greatly diminished from 58.5 per cent. of the premium income in 1932 to 39.9 per cent. in the year under review. Consequenty this department was able to show a good underwriting profit of £60,000 or 7.7 per cent. as against a loss of 3.5 per cent. in the previous year.

The premium incomes of the other three minor accounts show appreciable increases while good trading profits are shown in two of them and in the other namely the general account, a slight loss of £3,000 has been experienced. The total assets are scheduled at £79.674 million representing an increase of £5.590 million.

Life (Ordinary Branch).

New Business—

	1931	1932	1933
	(000 omitted £)		
No. of policies ...	39,283	41,042	44,361
Net sums assured ...	8,022	7,618	8,762
Net new premiums ...	508	557	746
Life fund at the end of the year ...	30,272	32,316	34,274
Net interest earned ...	£4-10-11	£4-10-5	£3-16-10

Life (Industrial) Account.

Premium income ...	7,132	7,255	7,443
Fund at the close of the year ...	28,952	31,595	33,991

Fire Account.

Premiums ...	4,93	5,02	776
Claims paid and outstanding ...	2.54	2,94	310
Commission and expenses	2,16	2,22	297
Percentage of claims to premiums ...	51.47	58.53	39.9%
Percentage of expenses to premium ...	43.86	44.33	38.2%
Underwriting profits after allowing 40% for unexpired risks ...	£15	−18	60

Accident Account.

Premiums ...	72	75	77
Claims paid and outstanding ...	37	36	38
Commission and expenses ...	15	17	15
Percentage of claims to premiums ...	51.19	48.60	49.9
Percentage of expenses to premium ...	20.91	22.91	19.4
Underwriting profits after allowing 40% for unexpired risks	19	20	23

Employers' Liability Account.

Premiums ...	20	20	22
Claims paid and outstanding ...	12	11	9
Commission and expenses ...	8	9	9
Percentage of claims to premiums ...	57.42	55.82	42.5
Percentage of expenses to premiums ...	38.06	45.61	39.5
Underwriting profits after allowing 40% for unexpired risks (actual amount) ...	773	−278	3

Motor Account.

Premiums ...	101	94	110
Claims paid and outstanding ...	60	59	54
Expenses ...	34	38	48
Percentage of claims to premiums ...	59.20	62.71	49.3
Percentage of expenses to premiums ...	33.80	41.09	43.5
Underwriting profits after allowing 40% for unexpired risks (act)	−3,827	−601	1

General Account

Premiums ...	31	62	113
Claims paid and outstanding ...	25	33	49
Expenses an commission ...	12	25	46
Percentage of claims to premiums ...	81.41	53.58	43.5
Percentage of expenses to premiums ...	37.26	40.91	40.8
Underwriting profits after allowing 40% for unexpired risks	−7	−9	−3

Profit and Loss Account.

Interest receipts excluding Life and Capital Redemption and all taxes ...	42	41	51
Shareholders' life profits ...	544	508	537
Net underwriting profits	24	−7	25
Dividend rate for year (tax-free) ...	47¼%	44.2%	46.5%
Amount of Dividend (ordy.) ...	522	530	558

The following are the interest earnings by the respective accounts (nett of Income-tax).

Fire	23,367	26,482
Accident	5,634	5,612
Employers' liabilities ...	1,255	1,362
Motor	2,521	2,607
General	1,351	2,443
Total	34,128	38,506

Total assets as shown by the Balance-sheet for the year ended 31st December, 1933 is £79,673,559 as against £74,083,473 in the previous year.

THE PRUDENTIAL ASSURANCE COMPANY, LTD.

(Established—1848).

Head Office: London.

Calcutta Office: Clive Bldgs., Calcutta.

The Prudential is the largest insurance institution of the British Empire and one of the biggest insurance companies of the world. An idea of its gigantic size can easily be gained from the fact that the total income of the Company from all sources during the year 1933 was £50.2 million or Rs. 67 crores nearly and its total assets £277.5 million or Rs. 370 crores.

The ordinary life branch of the Company shows remarkable progress in every respect. The new business has appreciated by £4.3 million to £23.54 million (Rs. 31.4 crores), the total business in force has increased to £225.37 million (Rs. 300 crores) from £216.4 million at the end of 1932. The total premiums received exceed £13 million and the ordinary life fund was substantially increased by £6.93 million to £111.07 million. The

annual valuation of the company's liabilities and assets at the end of 1933 has revealed a surplus of £2.93 million which has enabled the company to declare a reversionary bonus of 2.3 per cent. on whole life policies and 2 per cent. on endowment policies.

The industrial life branch which is the largest section of the company shows a new business of 2.42 million policies assuring a sum of £62.23 million, the total business in force amounting to 26.87 million policies and £520.22 million. The total premium income of this section for the year under review amounted to £19.51 million and the industrial life fund at the end of the year stood at £145.79 million.

The general branch is not so big as the other two branches, as the company began to transact this class of business at a much later period. The total premiums received during the year 1933 under all sections of the general branch amounted to £2.72 million which marks a big increase of £566,000 compared with the 1932 figure and the total assets of the general branch at the end of the year amounted to £5 million nearly.

The distribution of assets as shown in the consolidated balance sheet indicates the sound and cautious policy of investment pursued by the Prudential. There can be no doubt that the facts and figures contained in the Accounts and Balance sheet of the Company are sufficient to convince even a layman of the gigantic magnitude of the Prudential Assurance Company and of its solid strength and soundness. The Prudential is the bulwark of British Insurance.

Life Account.

(In thousands of £).

New Business—	1931.	1932.	1933.
No. of Policies	76,719	71,950	82,350
Amount	18,006	17,274	21,507
Premiums	12,170	12,877	13,183
Claims	8,224	9,456	10,075
Surrenders	1,685	1,967	1,394
Annuities	185	239	357
Expenses	1,593	1,684	1,705
Life fund at beginning of year	93,927	99,018	104,136
Life fund at end of year ...	99,018	104,136	111,069
Increase in fund	5,091	5,118	.6,933
Ratio of Expenses to premium ...	13.9%	13.1%	12.9%

Industrial Branch.

Premiums ...	18,804	19,133	19,514
Claims ...	8,261	7,368	9,000
Surrenders ...	2,926	3,592	3,440
Expenses ...	4,598	4,636	4,658
Fund at beginning of year ...	124,056	129,868	137,592
Fund at end of year	129,868	137,592	145,788
Increase in fund	5,812	7,724	8,196
Ratio of expenses to premium ...	24.5%	24.3%	23.9%

Fire Account.

Premiums ...	836	819	908
Claims ...	424	431	438
Expenses ...	361	353	384
40% reserve for unexpired risks	334	328	363
Additional reserve	352	361	397
Ratio of expenses to premium ...	43.2%	43.1%	42.3%
Ratio of reserves to premium ...	82.1%	84.1%	83.7%

Sickness and Accident Insurance.

New Business—			
Premiums ...	148	151	153
Claims ...	55	57	58
Expenses ...	49	53	55
40% reserve for unexpired risks	94	96	98
Additional reserve	69	73	77
Ratio of expenses to premium ...	33.1%	35%	36%

Employers' Liability Accounts.

Premiums ...	93	88	86
Claims ...	45	50	46
Expenses ...	33	37	39
Reserves ...	125	126	132
Ratio of expenses to premium ...	35.5%	42%	45.3%

Marine Account.

Premiums ...	110	92	75
Claims ...	166	95	63
Expenses ...	15	12	15
Reserves ...	425	431	294
Ratio of expenses to premium ...	13.6%	13%	20%

Balance Sheet.

(In thousands of £)

Liabilities—	1931.	1932.	1933.
Capital ...	1,450	1,450	1,450
Life fund ...	99,018	104,136	111,069
Industrial Assc. fund ...	129,868	137,592	145,788
Fire fund ...	687	689	760
Accident fund ...	177	184	190
Employers' Liability fund ...	126	126	132
Marine fund ...	425	431	295
Other insurance funds ...	1,391	1,671	2,355
Outstanding claims	704	730	933
Other liabilities	21,948	16,686	14,500
Total ...	255,794	263,695	277,472

	(In thousands of £)		
	1931.	1932.	1933.
Assets—			
Giltedge securities	1,03,354	101,828	115,910
Debentures and Preference shares	58,625	57,132	62,202
Other stocks and shares ...	31,832	28,626	29,536
Loans on company's policies	7,403	7,227	7,042
Other loans and mortgages ...	33,068	45,572	37,877
House Property ...	8,426	9,097	10,060
Cash ...	2,531	2,985	3,075
Other assets ...	10,555	11,228	11,770
Total ...	255,794	263,695	277,472

Profit and Loss Account.

	1931.	1932.	1933.
Receipts—			
Brought forward	1,315	1,274	1,420
Transferred :—			
Ordinary Branch account ...	198	...	...
Industrial Branch account ...	833	1,125	1,125
Fire account ...	67	65	45
Accident account	43	43	40
Employers' Liability account ...	19	7	...
Motor insurance account ...	1	15	...
Sinking fund account ...	...	6	9
Interest ...	32	35	30
Other items ...	...	...	115
Total ...	2,508	2,570	2,784
Disbursements—			
Dividend ...	1,192	1,114	1,314
Allocations ...	29	9	9
Other items ...	13	27	27
Carried forward	1,271	1,420	1,434
Total ...	2,508	2,570	2,784

ROYAL EXCHANGE ASSURANCE

(Established 1720)

Head Office: LONDON.

Calcutta Office: 1-2, OLD COURT HOUSE CORNER.

Bombay Office: ESPLANADE ROAD.

Royal Exchange Assurance Corporation is one of the oldest insurance companies of England and transacts all classes of business, in almost all parts of the world. The accounts of the Corporation for the year 1933 show some backward movement in the premium income of the general branches of insurance. But this is more than compensated by the definite improvement in the trading profits earned. The life department shows a continous progress in every respect.

The new business of the life account at £3.006 million has appreciated by £128,000. The expense ratio is being decreased steadily and stands at 15.5 per cent as against 15.9 per cent in 1932 and 16.9 per cent in 1931. The life fund has increased by nearly £800,000 to £12.234 million.

The fire premiums have dropped down by £211,000 to £1.462 million but the claims paid have substantially decreased to 44.4 per cent of the premium income as against 52.3 per cent in 1932. The trading results show a profit of £174,000 or 11.9 per cent as against a loss of 1.2 per cent in the previous year.

The premiums of the general accident department at £1.210 million show an insignificant decrease of £10,000 and here also the claims ratio has considerably decreased by more than 13 per cent. It is gratifying to note that the department has been able to show an underwriting profit of 3.3 per cent. as against a heavy deficit of 13.2 per cent in the last year. The accident fund at the end of the year stands at £1.373 million or 113 per cent.

The marine premiums have declined by £148,000 to £491,000, and in spite of this the department has been able to show a surplus of £55,000 on account of the low loss ratio. The marine fund stands at £864,000 or 176 per cent of the premiums income.

Life and Annuity Account.

	(000-*omitted* £)		
	1931.	1932.	1933.
Life Premiums ...	975	1,044	1,118
Considerations and Premiums for annuities ...	133	362	284
Interest and dividends ...	481	498	497
Net rate % earned on Funds ...	4-15-10	4-12-11	5-3-11
Claims ...	528	547	638
Annuities ...	99	102	131
Life surrenders ...	139	147	133
Commission and expenses (Life) ...	164	166	178
Percentage of expenses to Annual Premium ...	17.13	16.60	15.5
Percentage of new to Total Premiums ...	11.15	15.40	16.8
Life Fund at the beginning of the year ...	10,006	10,522	11,435
Life Fund at the end of the year ...	10,522	11,435	12,234
Increase during the year ...	516	913	799
New Business—			
No. of policies ...	4,285	5,790	5,823
Net sum assured ...	£2,417	2,878	3,006
Net new Premiums	109	161	185

Fire Account.

Premiums ...	1,624	1,673	1,462
Claims ...	858	874	649
Commission and expenses ...	729	798	728
Total Reserves ...	...	...	1,185
Percentage of claims to Premiums ...	52.83	52.25	44.4
Percentage of commission and expenses to Premiums ...	44.32	47.68	49.5
Underwriting profit after allowing 40% for unexpired risks	62	116	174

General Accident Account.

Premiums ...	1,117	1,220	1,210
Claims ...	655	852	681
Commission and expenses ...	463	487	493
Total Reserves ...			1,373
Percentage of claims to Premiums ...	58.64	69.85	56.2%
Percentage of expenses to Premiums	41.30	39.88	40.8%
Underwriting profit after allowing 40% for unexpired risks	56	19	40

Marine Account.

Premiums ...	462	640	491
Underwriting Profit transferred to Profit and Loss a/c.	Nil.	Nil.	Nil.
Funds ...	859	864	859

Profit and Loss Account.

Brought forward ...	...		957
Interest receipts (excluding Life and capital redemption)	201	200	201
Shareholder's life profit ...	39	39	39
Net trading profits ...	59	222	251
Dividend rate % for year ...	27	27	28
Dividend amount ...	196	192	192
Expenses not departmental ...	39	35	34
Exchange reserve account ...	275		107
Carried forward ...			1,046

The total assets as per balance sheet amounted to £19,847,802 as against £18,968,139 in the previous year.

ROYAL INSURANCE COMPANY.

(Established 1720.)

Head Office: LONDON.

Calcutta Office: 26 & 27, DALHOUSIE SQUARE.

The Royal Insurance Company occupies an important place amongst the insurance offices which operate on a world-wide scale. The total assets of the company amount to £53.40 million, and this is inclusive of investments to the amount of 10.01 million in allied or subsidiary companies. Taken in conjunction with Liverpool and London and Globe with which the Royal is associated, the group has a premium income of £23.36 million, with total funds amounting to £66.6 million. The reserves are on a strong basis, fire fund being 103 per cent. of the premium income, the marine fund being 182 per cent. and accident fund 100 per cent. The investments of the company have been drastically written down to market value ; and in view of the sensational rise which took place in securities in 1932 and 1933, the Royal should have a substantial inner reserve. The dividend for 1933 is 6-6 per share *less* Income-tax.

Life Account.

(In Thousands of £)

	1931.	1932.	1933.
New Business—			
Number ...	5,299	5,529	6,210
Amount ...	3,509	3,853	3,987
New Premiums ...	223	326	234
Total Premiums ...	1,822	1,916	1,868
Claims ...	1,200	1,648	1,305
Expenses and commission ...	226	229	223
Life fund at the beginning of year	20,466	21,362	22,271
Life fund at the end of year ...	21,362	22,271	23,148
Net increase in the fund ...	896	909	877
Ratio of Expenses to Premiums ...	12.4%	12.0%	11.9

Fire Account.

Premiums ...	6,063	5,740	5,531
Claims ...	3,088	2,928	2,538
Expenses and Commission ...	2,759	2,660	2,557
40% Reserve for unexpired risks	2,425	2,296	2,212
Additional Reserve ...	4,500	3,500	3,500
Total Reserves ...	6.925	5,796	5,712
Ratio of claims to Premium ...	51%	51%	45.9%
Ratio of Expenses to premium ...	46%	46.34%	46.2%
Ratio of Reserves to Premium ...	114%	101%	103.3%

Marine Account.

Premiums ...	1,029	918	809
Claims ...	521	640	228
Expenses ...	223	216	212
Reserves ...	1,670	1,547	1,468
Ratio of claims to Premiums ...	51%	69.7%	28%
Ratio of Expenses to Premiums ...	22%	23.5%	26.2%
Ratio of Reserves to Premiums ...	162%	168.5%	181.5%

Accident and General Account.

Premiums ...	5,444	5,061	5,007
Claims ...	3,188	3,072	2,821
Expenses and Commission ...	2,219	2,109	2,100
40% Reserve for unexpired risks	2,177	2,025	2,003
Additional Reserve ...	3,002	3,002	3,002
Total Reserves ...	5,179	5,027	5,005
Ratio of claims to Premiums ...	59%	60.7%	56.3%
Ratio of expenses to Premiums ...	41%	41.7%	41.9%
Ratio of Reserves to Premiums ...	95%	99.3%	100%

Balance Sheet.

Liabilities—			
Capital ...	2,800	2,800	2,800
Life Fund ...	21,362	22,271	23,148
Annuity Fund ...	1,855	2,259	2,448
Accidents and General Insurance Fund ...	5,180	5,027	5,005
Marine Fund ...	1,670	1,547	1,468
Fire Fund ...	6,925	5,796	5,712
Other Funds ...	1,118	3,803	2,290
Total Funds ...	38,110	43,503	40,071
Outstanding Claims of all Depts. ...	4,496	4,646	4,936
Other Liabilities	5,452	3,894	5,590
Total	50,858	52,043	53,397
Assets—			
Giltedge Securities	17,365	19,991	24,29[illegible]
Debentures and Preference shares ...	15,417	13,622	12,824
Equity Shares ...	4,634	4,458	4,372
Loans on Policies	1,717	1,696	1,614
Other Loans and Mortgages ...	3,706	3,321	3,081
House Property ...	2,325	2,600	2,342
Agents' Balances	2,738	2,603	2,435
Cash ...	2,092	2,836	1,357
Other Assets ...	904	916	1,079
Total	50,858	52,043	53,397

Profit and Loss Account.

Receipts—			
Brought Forward	1,564	1,399	1,565
Interest and Dividends ...	1,350	1,278	1,215
Transferred—			
Fire account ...	402	281	501
Marine account	126	105	73
Accident and General Account	117	34	107
Other Items ...	40	197	41
Total ...	3,599	3,294	3,501
Disbursements—			
Dividend ...	1,375	1,375	1,402
Allocations ...	595	155	110
Other Items ...	230	199	368
Carried Forward	1,399	1,565	1,621
Total	3,599	3,294	3,501

SCOTTISH UNION AND NATIONAL INSURANCE COMPANY.

(Established 1878)

Head office: EDINBURGH.

Calcutta office: 6 LYONS RANGE.

Bombay office: 16 BANK STREET.

The Scottish Union and National Insurance Company was formed in 1878 by an amalgamation of two companies, the Scottish Union (founded in 1824) and the Scottish National (founded in 1841). It took over the old City of Glasgow Life Assurance Company in 1913. Besides it controls the Maritime Insurance Company Ltd., American Union Insurance Company of New York and the Central Union Insurance Company. It transacts all the important kinds of insurance business and has got a network of branches throughout the world. It is one of the few foreign companies that does an extensive life business in India. The accounts of the year 1933 show remarkable results in almost every department in spite of the general trade depression that prevailed in the world during the period under review.

The new business of the life department at 3,083 policies assuring a sum of £2.744 million is again a record high figure for the 6th year in succession. The total premiums and the considerations for annuities amount to £935,000 and the life fund has advanced by £214,000 to £11.330 million.

The fire premiums at £946,000 have declined by £105,000 compared to last year's figure. The decrease is largely due to the drop in the premium income of the company in U. S. A. But this is more than counterbalanced by the substantial decrease in the fire losses from 58.7% to 50.1% with the consequent result that the underwriting profits of this department have risen to 7 per cent. from 0.2 per cent. last year. The fire fund stands at £1.373 million or 145 per cent. of the premium income.

The total premium income of the accident and miscellaneous branches at £253,000 has slightly appreciated over the last year's figure and the combined trading profits amounted to £17,000 or 7 per cent. The combined funds stand at £216,000 or nearly 80 per cent. of the premium income.

The marine premiums suffered a fall of £63,000 but the trading results enabled the company to release a profit of £50,000 from this department. The marine fund

at the end of the year stands at £421,000 or 140 per cent. of the premium income.

The total assets of the company amount to £16.182 million. The Profit and Loss Account shows an available sum of £740,000 including a sum of £46,000 brought forward from last year's account. After the payment of dividends and other allocations a sum of £480,000 is carried forward to the next year's account.

Life and Annuity Account.

New Business—

	1931.	1932.	1933.
Number of policies ...	3,093	2,834	3,083
Amount	2,435	2,537	2,744
Premium on new business	84	71	94
Total Premium ...	741	737	774
Claims and annuities	770	133	885
Commission and expenses ...	128	110	141
Life fund at beginning of year	10,798	11,116	11,116
Life fund at year-end	11,035	11,116	11,330
Increase in fund ...	237	81	214
Ratio of expenses to Premium ...	17.2%	18%	18.2%

Fire Account.

Premium ...	1,155	1,051	946
Claims	705	617	474
Expenses ...	510	485	458
Reserve at 50% of Premiums	578	525	473
Special reserve ...	800	900	900
Total reserve ...	1,378	1,425	1,373
Ratio of claims to Premium	61.0%	58.7%	50.1%
Ratio of expenses to Premium ...	44.1%	46.1%	48.4%
Ratio of reserve to Premium ...	119.3%	135.5%	145.1%

Accident Account.

Premium	26	28	31
Claims	13	12	17
Expenses	11	13	13
Reserve at 50% of Premium	13	14	15
Additional reserve ...	5	4	6
Total reserve ...	18	18	21
Ratio of claims to Premium	50.0%	42.8%	56.1%
Ratio of expenses to Premium ...	42.3%	46.4%	42.5%
Ratio of reserve to Premium	69.2%	64.2%	67.7%

Employers' Liability Assurance.

Premium	52	50	49
Claims	27	24	28
Expenses	21	21	21
Reserve at 50% of Premium	22	21	22
Additional reserve ...	33	36	34
Total reserve ...	55	57	56
Ratio of claims to Premium	51.9%	48.0%	56.1%
Ratio of expenses to Premium ...	40.3%	42.0%	42.2%
Ratio of reserve to Premium	105.7%	114.0%	114.3%

Marine Account.

Premium	331	362	299
Claims	224	227	200
Expenses	64	69	77
Reserve at 50% of Premium	165	181	150
Additional reserve ...	270	271	271
Total reserve ...	435	452	421
Ratio of claims to Premium	67.6%	62.7%	66.9%
Ratio of expenses to Premium ...	19.3%	19.0%	25.8%
Ratio of reserve to Premium	131.0%	124.8%	140.8%

Miscellaneous Account.

Premium	177	173	172
Claims	79	78	78
Expenses	76	78	76
Reserve at 50% ...	89	86	86
Additional reserve ...	35	53	57
Total reserve ...	124	139	143
Ratio of claims to Premium	44.6%	45.0%	45.1%
Ratio of expenses to Premium ...	42.9%	45.0%	44.1%
Ratio of reserve to Premium	70.0%	80.3%	83.1%

Balance Sheet as at December 31st.

Liabilities—			
Capital ...	300	300	300
Funds: Life and annuity ...	11,035	11,116	11,330
,, Fire ...	1,378	1,425	1,373
,, Accident ...	18	18	21
,, Employers' Liability	55	57	56
,, Marine ...	435	452	421
General reserve fund	500	500	500
Other funds ...	387	608	682
Total funds ...	14,108	14,176	14,383
Other items ...	1,275	1,530	1,499
Total ...	15,682	16,006	16,182
Assets—			
Giltedge ...	4,415	4,718	5,548
Debentures and Preference shares ...	6,476	6,463	6,326
Equity shares ...	255	246	239
Mortgages and loans	2,886	2,758	2,403
Other investments and other items ...	1,383	1,442	1,407
Cash	267	379	259
Total ...	15,682	16,006	16,182

Profit and Loss Account.

Receipts—			
Brought in ...	376	308	460
Transferred from fire account ...	68	60	126
Transferred from accident account ...	2	3	1
Transferred from employers' liability account ...	7	4	3
Transferred from miscellaneous account ...	21	226	23
Transferred from marine account ...	30	50	50
Other items ...	82	79	77
Total ...	586	730	740

Disbursements—

Dividend amount ...	149	148	148
Allocations ...	50	100	52
Other items ...	79	170	60
Carry forward ...	308	312	480
Total ...	586	730	740

STANDARD LIFE ASSURANCE COMPANY.

(Established 1825).

Head Office: EDINBURGH.

Calcutta Office: STANDARD BUILDINGS, CALCUTTA.

The Standard Life Insurance Company is one of the oldest life offices of Scotland, having been established in the year 1825. In 1925 when the centenary of the office was celebrated, the company was converted into a mutual one, the shareholders' capital of £850,000 having been converted into fixed stock bearing interest at 5 per cent. Since then the company has been growing from strength to strength and the new business of the company is increasing rapidly.

The new business of the company for the year ending November 15, 1933 at £3.641 million shows a substantial increase of £720,000 as compared with the previous year, and this is the highest recorded new-business in the history of the company. The total premiums amounted to £1.270 million, considerations received for annuities were £945,000 and the net interest income exceeded £1 million, yielding a net rate of 4¾ per cent. The life fund has been substantially increased by a sum of £1.212 million to £ 22.336 million. The total assets stand at £25.071 million. The expense ratio is kept steady at 15.9 per cent.

Valuation is made annually and the company's reserves are calculated on a 2½ per cent. interest basis with an additional margin that makes it approximately equivalent to one at 2¼ per cent. interest—a stronger basis of valuation than that adopted by any other Assurance Company in the world. Yet £85,000 was added to the inner reserves besides producing a surplus of £365,000. But of this surplus a compound reversionary bonus of 42s. per cent. was allotted and a balance of £31,000 is carried forward. The maintenance of this high rate of bonus, the chairman rightly pointed out, was due in a large measure to the cautions and conservative policy, pursued by the company for many years, of transfering a portion of the profits to the reserves.

Life Account.

New Business—

(In Thousands of £)

	1931.	1932.	1933.
Number of Policies ...	3,883	4,039	5,866
Amount Net ...	2,764	2,922	3,541
Net Premium on new business ...	139	192	176
Total Premium ...	1,188	1,235	1,272
Interest	934	994	1,018
Claims by death ...	614	575	568
" " maturity ...	295	281	271
Commission and Expenses	196	195	202
Life Fund at beginning of year ...	18,326	19,452	21,124
Life Fund at year-end	19,452	21,124	22,336
Increase in Fund ...	1,126	1,672	1,212
Ratio of expenses to premium ...	16.5%	15.8%	15.9%

Balance Sheet.

Liabilities—

Life Assurance and Annuity Fund ...	19,452	21,124	22,336
Capital Redemption Assurance and Annuity Certain Fund ...	559	698	728
General Reserve ...	800	850	850
Perpetual Stock ...	850	850	850
Total Funds ...	21,661	23,517	24,765
Current Liabilities ...	300	327	306
Total ...	21,961	23,844	25,071

Assets—

Giltedge	6,828	7,785	9,224
Debenture and Preference Stocks ...	7,710	9,095	9,403
Ordinary Stocks ...	2,730	1,995	2,416
Mortgages and Loans on Life Interests and Reversions ...	2,119	,511	1,620
Loans on Policies ...	1,528	,112	1,421
Other Investments ...	557	73	643
Agents' Balances, etc	195	...	67
Cash ...	294	278	277
Total	21,961	23,844	25,071

SUN INSURANCE OFFICE, LTD.

(Established 1710)

Head Office: LONDON

Calcutta Office: 2, HARE STREET

Bombay Office: 24, BRUCE ROAD

The Sun is the oldest insurance office in the world. The company transacts on a world wide scale fire, marine and all branches of general accident insurance. It is connected with the Sun Life Assurance Society which transacts life business within

the United Kingdom. The aggregate premium income of the office from all the 3 departments amounts to £4.414 million representing a fall of £7,000 only. This is indeed creditable compared to the performances of similar composite office doing business on a wide area. Substantial profits were earned in each section and the total underwriting profits of the year constitute a record in the history of the office.

The fire premiums at £2.238 millions show a drop of £114,000 compared to the previous year. But in common with the experience of most other composite offices the loss ratio has fallen considerably by 6 per cent. and consequently the trading profit of this section has appreciated to £256,000 or 11.8 per cent. The total reserves amount to £2.495 million or 111.5 per cent. of the premium income.

The accident account shows a substantial rise of £109,000 in the premium income which stands at £1.569 million. Here also the loss ratio has fallen down by 5.2 per cent. to 52.0 per cent. and underwriting profits amount to £125,000 or 8 per cent. The accident fund at the end of the year is kept at £1.093 million or nearly 70 per cent. of the premium income.

The marine premiums at £606,000 is nearly the same as in last year. The contribution of this section to the profit and loss account amounts to £109,000. The marine funds stand at £902,000 or 148.8 per cent. of the premium income.

The total assets of the office are shown at £9.918 million in the balance sheet. The profit and loss account shows a total available sum of £1.801 million including the sum of £1.091 million brought forward from last year's account. After the payment of dividends to shareholders and other allocations a sum of £1.159 million is carried forward.

Fire Account.

(In Thousands of £)

		1931.	1932.	1933.
Premiums	...	2,455	2,352	2,238
Claims	...	1,140	1,132	943
Expenses	...	1,110	1,106	1,093
Reserve at 40% for unexpired risk	...	982	941	895
Additional reserve	...	1,600	1,600	1,600
Total reserve	...	2,582	2,541	2,495
Ratio of Claims to Premium	...	46.5%	48.1%	42.1%
Ratio of Expenses to Premium	...	45.2%	47.0%	48.8%
Ratio of Reserve to Premium	...	105%	108%	111.5%

Marine Account.

Premiums	...	567	608	606
Claims	...	456	520	460
Expenses	...	41	60	61
Reserve	...	539	772	772
Additional reserve	...	130	130	130
Total reserve	...	669	902	902
Ratio of Claims to Premium	...	80.4%	85.5%	75.9%
Ratio of Expenses to Premium	...	7.2%	9.9%	10.1%
Ratio of Reserve to Premium	...	118%	127%	148.8%

Accident Account.

Premiums	...	1,474	1,460	1,569
Claims	...	835	835	814
Expenses	...	556	540	585
Reserve for unexpired Risks	...	590	584	628
Additional reserve	...	465	465	465
Total reserve	...	1,055	1,049	1,093
Ratio of Claims to Premium	...	56.6%	57%	52.0%
Ratio of Expenses to Premium	...	37.7%	37%	40%
Ratio of Reserve to Premium	...	72%	71.8%	69.7%

Balance Sheet.

Liabilities—				
Capital ...	...	600	600	600
Funds—				
Fire ...	...	2,582	2,541	.495
Accident ...	...	1,055	1,049	,093
Marine ...	...	669	902	902
General Reserve Fund		1,000	1,000	,000
Pension Fund	...	288	299	309
Total Funds	...	5,594	5,791	000
Other Items	...	2,945	3,891	318
Total ...	...	9,139	9,682	9,918
Assets—				
Giltedge ...	...	2,811	3,044	3,20.
Debentures and Preference shares	...	2,360	2,460	2,263
Equity shares	...	227	308	467
Mortgages and loans		345	343	480
Other Investments and other Items	...	2,672	2,717	2,678
Cash ...	...	724	810	
Total ...	...	9,139	9,682	9,918

Profit and Loss Account.

Receipts—				
Brought in	...	1,081	1,081	1,091
Transferred from Fire account	...	297	250	338
Marine ...	...	71	100	109
Accident ...	...	90	128	162
Other Items	...	168	126	101
Total ...	...	1,707	1,685	1,801
Disbursements—				
Dividend Rate %	...	30%	53⅓%	53⅓%
„ Amount	...	251	244	244
Allocations	...	300	235	252
Other Items	...	45	359	146
Carry forward	...	1,081	847	1,159
Total ...	...	1,707	1,685	1,801

YORKSHIRE INSURANCE COMPANY.

(Established 1824)

Head Office : YORK.

Bombay: 10, BRUCE STREET, FORT.

This company is one of the old established companies of England and it has acquired a number of subsidiary companies which do their business separately but whose accounts are included in those of the Yorkshire. Like many other composite offices, the premium incomes of the general branches have suffered slight setbacks during the year 1933 but the life department shows steady and continuous progress in every respect. The aggregate premium income of the Company from all departments amounted to £3.512 million as against £3.714 million in 1932 and the total assets stand at £14.351 million as against £13.713 million in the previous year.

The life new business exceeded £2½ million showing an increase of £721,000 over the last year's figure. The life fund has been increased by the substantial amount of £714,000 to £8.447 million. The quinquennial valuation of the life assets and liabilities as on December 31, 1933, has revealed the strong position of the department, disclosing a surplus of £900,000 nearly. Of this sum £611,000 is distributed as bonus to policyholders, £68,000 is allotted as the shareholders' portion of the assets, and £261,000 is carried forward unallotted. The same bonus as that awarded in 1928 is maintained and the average rate is 48s. per cent per annum.

The fire account shows a fall of £105,000 in the premium income which stands at £904,000 but the underwriting profits have considerably increased to £106,000 or 11.8 per cent as against £27,000 or 2.7 per cent in 1932. The accident premiums at £1.219 million is very nearly same as in 1932 and a useful trading profit is disclosed. The marine premiums at £382,000 are down by £61,000 and the amount transferred to the Profit and Loss account from this department amounted to £50,000. The marine fund is kept at the high ratio of 162 per cent of the premium income.

Life Account.

(In thousands of £).

	1931.	1932.	1933.
New business—			
Number ...	2,440	2,695	3,073
Amount ...	1,711	1,828	2,549
Premium on new business ...	74	114	135
Total premiums ...	610	676	705
Interest ...	315	315	328
Claims and annuities	438	463	396
Commission and expenses ...	79	91	98
Life fund at beginning of year ...	6,854	7,145	7,733
Life fund at year-end ...	7,145	7,733	8,447
Net increase in life fund ...	291	588	714
Ratio of expense to premium ...	12.9%	13.5%	13.9%

Fire Account.

	1931.	1932.	1933.
Premiums ...	1,030	1,010	904
Claims ...	529	567	449
Expenses ...	409	411	392
Total reserve ...	762	724	682
Ratio of claims to premium ...	51%	56.1%	49.6%
Ratio of expenses to premium ...	40%	40.7%	43.3%
Ratio of reserve to premium ...	74%	71.6%	75%

Marine Account.

	1931.	1932.	1933.
Premiums ...	503	443	382
Claims ...	377	353	264
Expenses ...	89	79	72
Reserve ...	623	603	617
Ratio of claims to premium ...	75%	79.7%	69.1%
Ratio of expenses to premium ...	18%	17.8%	18.7%
Ratio of reserve to premium ...	124%	138.4%	161.5%

Accident and General Account.

	1931.	1932.	1933.
Premiums ...	1,305	1,223	1,219
Claims ...	725	712	668
Expenses ...	532	511	528
Total reserve ...	761	729	729
Ratio of claims to premium ...	56%	58.2%	54.8%
Ratio of expenses to premium ...	41%	41.8%	43.0%
Ratio of reserve to premium ...	58%	59.6%	59.8%

Balance Sheet.

	1931.	1932.	1933.
Liabilities—			
Capital ...	288	290	290
FUNDS—			
Life ...	7,145	7,733	8,447
Fire ...	732	724	682
Accident and general	761	729	729
Marine ...	623	603	617
Sinking and capital redemption fund	344	421	466
General reserve fund	1,011	1,258	1,074
Total funds ...	10,616	12,269	12,487
Other items ...	2,042	1,444	1,574
Total ...	12,946	13,713	14,351

Assets—

Giltedge investments	3,454	3,718	4,515
Debentures and Preference shares ...	1,796	2,904	1,787
Equity shares ...	88	88	89
Loans on life policies	428	447	464
Other loans and mortgages ...	2,768	2,791	2,774
Other investments and other items ...	4,036	3,238	4,212
Cash	376	532	560
Total ...	12,946	13,713	14,351

OCEAN, ACCIDENT AND GUARANTEE CORPORATION, LTD.

Head Office:—LONDON.

Head Office for India :—32, DALHOUSIE SQUARE, CALCUTTA.

Indian Branches :—

BOMBAY—CHURCHGATE HOUSE, CHURCHGATE STREET, FORT.

LAHORE—THE MALL.

MADRAS—1ST LINE BEACH.

RANGOON—128, PHAYRE STREET.

The Corporation was founded in 1871, and since that time has made rapid strides in the field of Accident Insurance. It has a world-wide organization whilst in India it has the largest Casualty Insurance income amongst British Offices, and specialises in Motor, Workmen's Compensation and other classes of Accident business.

ACCIDENT ACCOUNT

	1931	1932	1933
	£	£	£
Premiums ...	5,029,545	4,470,172	4,429,146
Claims ...	3,615,965	2,740,765	2,523,999
Expenses ...	2,071,823	1,912,771	1,878,987
Reserve ...	3,454,859	3,318,359	3,324,694
Ratio of Claims to Premium ...	71.89	61.31	56.98
Ratio of Expenses to Premium ...	41.19	42.78	42.42
Ratio of Reserve to Premium ...	68.69	74.23	75.06

REVIEWS OF BALANCE SHEETS

FOREIGN INSURANCE COMPANIES

ALLIANZ UND STUTTGARTER LIFE INSURANCE BANK, LTD.

Head Office : BERLIN.

Head Office for India: QUTAB ROAD, DELHI.

As the title indicates, this concern carries on both insurance and banking business. The company has such large surplus funds that it found it convenient or rather necessary to conduct banking business side by side with insurance. The total assets of the company amount to £54.4 million. An indication of the largeness of the company can be found in the fact that the company has paid claims to the extent of £1.9 million during 1933. Recently the Allianz Und Stuttgarter has extended its business widely and has acquired shares of other life offices, both within Germany and without. The growth of the company within the last few years has been remarkable. In 1926, the total assurance in force was £26 million, and this has increased to £234.6 million by 1933. During the year 1933, especially in its second half, the new business, compared with that of the previous year, has experienced a general increase. Mortality was satisfactory just like in the previous year, the profits on mortality in the direct business amounting to £785,754. The investments of the Company, without the funds of the revalorisation stock, have increased by £3.78 million against the previous year. Profit on investments amounted to £220,953. Including the profit of non-participating business at home and abroad as well as of the reassurance business the total surplus amounted to £2.1 million.

(£ 000's omitted).

Direct New Business—	1932.	1933.
Number ...	189,133	...
Amount ...	20,351	...
Total Business in force	232,110	234,611
Profits on mortality direct business	720	786
Total Surplus	2,334	2,083

Balance Sheet.

Liabilities—		
Share Capital ...	1,429	1,460
Statutory Reserve funds ...	143	146
Net Liabilities ...	32,873	36,570
Reserves for claims pending	140	124
Undivided policyholder's profit ...	6,769	7,110
Investment Reserve fund ...	749	1,284*
Miscellaneous Reserves ...	1,286	1,382
Revalorisation stock ...	5,855	4,871
Other items ...	1,896	1,468
Total ...	51,140	54,415

*Includes also Reserve for real property depreciation.

Assets—	1932.	1933.
Securities	10,739	12,030
Bonds of Public bodies ...	3,796	5,762
Loans on policies within their surrender value ...	4,236	4,678
Mortgages	23,737	23,702
Real property	1,848	2,466
Cash	98	106
Other items	6,686	5,671
Total ...	51,140	54,415

Profit and Loss Account.

Receipts—		
Balance brought forward ...	37,420	43,395
Premiums	9,803	9,402
Interest, etc.	2,538	2,710
Revalorisation stock ...	8,999	6,300
Other items	2,154	3,156
Total ...	60,914	64,963

Expenditures—		
Claims paid	1,904	1,987
Surrenders	1,611	1,882
Management expenses and commissions ...	1,768	2,127
Undivided policyholders' profit	6,769	7,110
Valuation reserve at end of year	32,873	36,570
Revalorisation stock ...	8,974	6,299
Net profit	214	151
Other items	6,801	8,837
Total	60,914	64,963

ASSICURAZIONI GENERALI

(The General Insurance Company, Ltd. of Trieste and Venice.)

(Established—1831).

The Assicurazioni Generali recently celebrated the 100th anniversary of its foundation, and it can claim to be one of the oldest insurance institutions in Europe. The company has a number of offices in almost all the countries of the world.

The profits for the year 1932 reached about 30,000,000 Lire. The annual premium income of the company exceeds £10,000,000 per year. The investments of the company are distributed in the various countries in which the company operates.

During the past hundred years the company has paid claims to the total value of more than 9,000,000,000 Lire (*i.e.* about £150,000,000).

The company has recently opened its head office for India, Burma and Ceylon in Calcutta.

Revenue Accounts.

(In Lire 000's omitted).

	1932	1933
Premiums—		
Life Department ...	307,065	263,764
Fire Department ...	147,053	143,711
Marine Department ...	80,136	70,019
Burglary Department ...	13,552	12,677
Miscellaneous Reinsurances	19,394	18,853
Interest on investments	81,331	83,148
Other income ...	33,472	31,115
Claims—		
Life Department ...	71,086	64,642
Fire Department ...	38,766	36,323
Marine Department ...	13,055	14,824
Burglary Department ...	2,115	2,199
Miscellaneous Reinsurances	9,158	9,139
General Expenses and commission ...	125,248	124,700
Insurance Funds at end of year—		
Life Department ...	1,259,665	1,291,289
Fire Department ...	73,913	76,455
Marine Department ...	22,665	19,266
Burglary Department ...	9,631	10,484
Miscellaneous Reinsurances	12,738	12,888

Balance Sheet.

(In Lire 000's omitted).

	1932.	1933.
Liabilities—		
Capital ...	60,000	60,000
Special Reserve Fund ...	50,000	55,000
Premium Reserves ...	1,314,851	1,351,256
Reserve for outstanding claims ...	63,761	59,125
Other reserves ...	156,694	189,534
Other liabilities ...	326,167	315,714
Bonds.		
Total ...	1,971,473	2,030,629
Assets—		
Cash ...	138,590	147,271
Government Bonds and Provincial and Municipal Loans ...	517,380	493,508
Other bonds, stocks and shares ...	464,665	463,150
House Property ...	336,764	388,542
Loans on company's life policies ...	155,124	148,006
Other loans and mortgages ...	37,128	36,966
Other items ...	321,822	353,186
Total ..	1,971,473	2,030,629
Profit and Loss Items—		
Brought forward ..	853	2,101
Profits ..	29,707	28,828
Dividend distribution ..	21,000	21,000
Allocation to funds ..	7,460	7,120
Carried forward ..	2,101	2,809

THE GREAT EASTERN LIFE ASSURANCE CO., LTD.

(Established—1908).

Head Office : SINGAPORE.

Calcutta Office: 1, ROYAL EXCHANGE PLACE.

The Great Eastern is one of the big foreign life offices doing extensive business in India. During recent years the company has suffered great setback in the procuring of new business but it is gratifying to note that during the year 1933 the company has considerably increased (over 50 per cent.) its new business over the 1932 figure.

During the year under review the company booked 2,751 policies assuring a sum of Rs. 81.74 lakhs as against Rs. 54.11 lakhs in the previous year. The total business in force at the end of the year was Rs. 5.24 crores. The total premium income was Rs. 31.85 lakhs and the interest income Rs. 10.04 lakhs. The life fund has been increased by over Rs. 6 lakhs to Rs. 1.86 crores. The assets of the company at the end of the year stand as Rs. 2.12 crores.

(In thousands of Rs.)

	1932.	1933.
New Business—		
Number of policies ...	1,987	2,751
Amount	54,11	81,74
Total Premiums ...	30,50	31,85
Interest, Dividends and Rents	10,25	10,04
Claims	12,75	18,55
Commission and expenses ...	9,28	10,04
Amount of Life fund at the beginning of the year ...	1,72,31	1,80,41
Amount of Life fund at the end of the year ...	1,80,41	1,86,43
Increase in fund ...	8,10	6,02
Ratio of expenses to premium	30.4%	31.5%

Balance Sheet.

Liabilities—		
Capital ...	2,65	2,65
Life fund ...	1,80,41	1,86,43
Outstanding claims	4,66	4,86
Reserve fund	14,80	15,39
Other liabilities	2,16	2,42
Total	2,04,68	2,11,75
Assets—		
Giltedge securities ...	28,86	39,57
Preference and ordinary stocks and shares ...	21,11	24,16
Loans on mortgages ...	97,61	87,12
Loans on Company's policies	26,00	28,22
Cash	4,82	2,14
Other assets	26,28	30,54
Total ...	2,04,68	2,11,75

THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA, LTD.

(Established—1869).

Head Office : MELBOURNE, AUSTRALIA.

Calcutta Office: CHARTERED BANK BDGS.

Bombay Office: 15, ELPHINSTONE CIRCLE.

The National Mutual of Australasia is one of the soundest and biggest mutual life offices of the world, and does considerable business in India. The accounts of the Association for the year 1933 show considerable improvement over the figures of 1932. The new policies issued during the year 1933 amounted to 18,067 assuring a sum of £7.577 million as against 16,361 policies assuring £6.550 million, in the previous year. The total premiums received amounted to £3.238 million showing an increase of £113,000. The expense ratio of the Association stands at the low percentage of 12. The life fund at the end of the year has been considerably strengthened by £1.062 million to £36.243 million. The total assets of the Association stand at £37.547 million and are distributed scientifically.

(In thousands of £).

	1931-32	1932-33
New Business—		
Number of policies ...	16,361	18,067
Amount	6,550	7,577
Premiums on New business	260	306
Total Premiums ...	3,125	3,238
Claims by death	869	982
„ maturity ...	1,276	1,236
Commission and expenses ...	376	387
Life fund at beginning of year	34,558	35,181
Life fund at the end of the year	35,181	36,243
Increase in fund ...	623	1 062

Balance Sheet.

Liabilities—		
Life fund	35,181	36,243
Reserve fund	661	831
Outstanding claims ...	352	418
Other items	59	55
Total ...	36,253	37,547
Assets—		
Government securities ...	9,262	10,137
Debentures and stocks ...	5,910	6,297
Loans on mortgage ...	8,883	8,780
Loans on policies ...	6,785	6,815
Cash	1,379	1,563
Other items	4,034	3,955
Total ...	36,253	37,547

SUN LIFE ASSURANCE COMPANY OF CANADA.

(Established 1865)

Head Office: MONTREAL, CANADA.

Calcutta Office: DALHOUSIE SQUARE, CAL.

Bombay Office: CANADA BLDGS., BOMBAY.

The Sun Life of Canada is one of the largest life insurance companies in the world. It has been established in India for a long time and this accounts for a considerable amount of total Indian Life business in force. The popularity of the company has suffered a slight setback recently with the result that its business results show a marked fall in the years 1932 and 1933. But the business prospects have definitely improved towards the close of the year 1933 and if the same improvement continues, the company is bound to make good the recent retrograde movement in its business output.

The new business for the year 1933 has fallen to $217 million from$284 million in 1932 and the total premiums received at $104 million show a decrease of $12 million compared to the figure of 1932. The life fund has been increased by $18 million to $533 million.

Among the assets of the company gilt-edged securities account for nearly 19 per cent of the total assets, policy loans to 16 per cent and stocks and shares to 49 per cent,

NEW ZEALAND INSURANCE CO., LTD.

(Established 1859).

***Head Office*: Auckland, N Z.**

***Calcutta Office*: 26, Dalhousie Square, West.**

The New Zealand Insurance Company is one of the largest foreign insurance companies doing business in India. The company has a number of branches in New Zealand, Australia, America, S. Africa, India and the Far East. During the year under review, the premiums from fire, marine and accident departments amounted to £1,001,328 as compared with £1,008,530 in 1932-33. The profits for the year at £110,593 show an increase of £35,989 over the previous year. Dividend has been declared at 10 per cent. just as in the previous year. But this year being the 75th anniversary of the company, the Directors have declared a further bonus of 2½ per cent.

UNDERWRITING ACCOUNT.

(In thousands of £)

	1933-34
Fire, Marine and Accident Premiums	1,001
Reserve for Unexpired Risks at 31st May, 1933	506
Total ...	1,507
Commissions, Salaries, Directors' Fees and other Expenses ...	292
Government Taxes and Appropriations and Payments to Fire, Marine and Accident Associations	45
Fire, Marine and Accident Losses and Appropriations for Unadjusted Losses	554
Reserve for Unexpired Risks at 31st May, 1934	506
Balance	110
Total ...	1,507

PROFIT AND LOSS ACCOUNT.

(In thousands of £)

	1933-34
Receipts—	
Brought in	105
Interest and Rents	118
Balance brought down from Underwriting Account ...	110
Total ...	333
Disbursements—	
Dividend amount	75
Balance	258
Total ...	333

BALANCE SHEET

(In thousands of £)

Liabilities—	
Capital	1,500
Reserve Fund	500
Reserve for Unexpired Risks ...	506
,, ,, Contingencies ...	146
,, ,, Investment fluctuation	58
Other items	261
Balance	258
Total ...	3,224

Assets—	
Giltedge and other Securities ...	2,105
Mortgages and deposits ...	206
Shares	174
Office Premises and other properties	418
Interest and Rents	38
Branch and Agency Balances etc.	160
Cash	123
Total ...	3,224

Life Account.

New Business—	1932.	1933.
	(In thousands of $)	
Number of Policies ...	95,122	77,026
Amount assured ...	284,099	216,567
Premiums on New Business	15,179	11,062
Total Premiums ...	115,698	103,978
Interest, Dividends & Rents	24,021	23,856
Total assurance in force ...	2,928,952	2,770,454
Claims by death ...	25,803	24,134
Total Claims ...	57,876	47,869
Expenses and commission	22,318	17,712
Life fund at the end of year ...	515,231	532,954

Balance Sheet.

Liabilities—	1932.	1933.
Capital ...	2,000	2,000
Life and Annuity fund ...	515,231	532,953
Other-funds ...	4,781	4,886
Claims, surrenders etc. due and unpaid ...	10,932	10,596
Other liabilities ...	78,492	73,711
Total ...	611,436	624,146

Assets—	1932.	1933.
Giltedge Securities ...	*107,862	*116,009
Preference and other stocks	312,049	305,220
Loans on Company's policies ...	99,478	100,981
Other loans and mortgages	29,897	28,844
Property ...	27,408	27,983
Outstanding and deferred premiums ...	19,618	18,286
Cash ...	5,556	18,201
Other assets ...	9,568	8,622
Total ...	611,436	624,146

* Including Municipal, Public Utility and other Bonds.

PUBLIC UTILITIES SECTION:

LIGHT RAILWAYS

D. Y. ANDERSON, M.A.

Writing more than thirty years ago, W. H. Cole said that "the subject of Light Railways may be compared to a country which has no fixed frontiers, or to those Arctic lands whose northern limits are still unmapped. The reader's first and natural demand for a definition of the term light railways must be frankly met with the disappointing reply that a hard and fast definition, at once concise, exact, and comprehensive, is not forthcoming." For general purposes, however, the terms light railway and narrow-gauge railway may be taken to be, though in fact they are not, synonymous, and it is sufficient for the present to avoid academic discussion and to restrict consideration to the narrow-gauge railway systems of India.

Railways in India are constructed on four different gauges—the broad or standard gauge of 5 ft. 6 ins., the metre gauge of 3 ft. 3⅜ ins., and the two narrow-gauges of 2 ft. and 2 ft. 6 ins. When the building of railways in India was first proposed, nearly a hundred years ago, it was suggested that the British standard gauge of 4 ft. 8½ ins. should be adopted, as this would facilitate the supply of locomotives and rolling stock from England. Lord Dalhousie, however, was advised by Mr. Simms (who had come out from England in 1845 as Consulting Engineer) to recommend a gauge of 6 ft., which would have greater advantages than were furnished by the British standard, and would be practically as good as the old 7 ft. track. The 5 ft. 6 ins. gauge was the eventual compromise, and has led to the Indian "break of gauge" as between standard and metre, to which have been attributed—probably wrongly—so many of the misfortunes of railway working in India.

The broad and metre gauges have always been looked upon as the main line gauges, the narrow gauge lines being considered as comparatively cheap tributaries to their more important and more expensive brethren. A study of the Indian railway map shows that the narrow lines are in almost all cases small systems connecting the main lines with agricultural, suburban or hill areas in which broader gauge construction would have been uneconomic. The map therefore consists of the long main routes on the broad and metre gauges ,and in the intervening spaces a scattered pattern of short narrow gauge lines, feeding and being fed by the main routes.

The latest issue, for the year 1932-33, of the Annual Report by the Railway Board on Indian Railways gives the total route mileage of all the railways in the country as 42,961 on March 31, 1933. Of this total 21,131 miles are broad gauge, 17,653 are metre gauge, and 4,177 miles are narrow gauge. The light railways are thus just under 10 per cent. of the entire railway system.

Speaking numerically, there are altogether 165 railway systems—42 broad gauge, 62 metre, and 61 narrow, the average route mileages being rspectively 500, 280 and 68. Of the narrow gauge lines, four are abnormally long—Satpura with 626 miles, the Gaekwar's Baroda lines with 333, the Gwalior system with 295, and the Barsi line with 203. The remaining 57 systems comprise 2,720 route miles, with an average of just under 50. These somewhat uninteresting figures show what the character of the light railways is, and indicate the reason for their existence.

Some of the 61 narrow gauge railways are owned by the Government of India, some by Native States, and some by commercial companies ; the following statement shows them under these headings and gives particulars of the gauges, route mileage, year of opening, and managing or working agency.

I. State-owned.

	Gauge	Mileage	Opened	Agency
Bombay-Baroda & Central India	2½	72	1914	B. B. & C. I. R.
Dharwa-Pusad	2½	48	1931	G. I. P. R.
Eastern Bengal	2½	17	1881	E. B. R.
Jorhat Provincial	2	32	1888	Macneill & Co.
Kalka-Simla	2½	60	1903	N. W. R.
Kangra Valley	2½	103	1928	N. W. R.
Kohat-Thal	2½	62	1903	N. W. R.
Morappur-Hospur	2½	73	1906	S. I. R.
Purulia-Ranchi	2½	117	1907	B. N. R.
Raipur-Dhamtara	2½	57	1900	B. N. R.
Satpura	2½	626	1903	B. N. R.
Tirupattur-Krishnagiri ...	2½	25	1905	S. I. R.
Trans-Indus	2½	157	1913	N. W. R.
Tumsar-Tirodi	2	19	1916	B. N. R.
Zhob Valley	2½	174	1921	N. W. R.

Total route mileage 1,637
Average route mileage 109

II. Indian State-owned.

	Gauge	Mileage	Opened	Agency
Bodeli Chhota-Udaipur ...	2½	23	1917	Baroda State
Cutch State	2½	72	1905	Cutch State
Dholpur State	2½	55	1908	Dholpur State
Gaekwar's Baroda State ...	2½	333	1873	Baroda State
Gwalior Light	2	295	1899	Gwalior State
Kolar District	2½	64	1913	Mysore State
Parlakimedi Light	2½	56	1900	B. N. R.
Piplod Devgad Baria ...	2½	10	1929	B. B. & C. I. R.
Rajpipla State	2½	58	1897	B. B. & C. I. R.
Tarkera Narasimharajapura ...	2	27	1915	Mysore State

Total route mileage 993
Average route mileage 99

III. Company-owned.

	Gauge	Mileage	Opened	Agency	
Arrah-Sasaram	2½	65	1911	Martin & Co.	D
Ahmedpur-Katwa	2½	32	1917	McLeod & Co.	F
Bankura-Damodar River ...	2½	60	1916	McLeod & Co.	F
Bangalore-Chik Ballapur ...	2½	39	1915	Mysore State	E
Baraset-Basirhat	2½	52	1905	Martin & Co.	D
Barsi Light	2½	203	1897	Barsi Lt. Ry. Co.	B
Bengal Provincial	2½	33	1894	Bengal Prov. Ry. Co.	G
Bukhtiarpur-Bihar	2½	33	1903	Martin & Co.	D
Burdwan-Katwa	2½	32	1915	McLeod & Co.	F
Champaner-Shivrajpur Pani ...	2½	31	1911	Killick Nixon & Co.	A
Darjeeling-Himalayan ...	2	51	1880	Gillanders, Arbuthnot & Co.	C
Darjeeling-Himalayan Extensions	2	95	1914	Gillanders, Arbuthnot & Co.	A
Dashgara-Jamalpurganj ..	2½	8	1917	Bengal Prov. Ry. Co.	F
Dehri-Rohtas	2½	26	1911	Octavius Steel & Co.	B
Dhond-Baramati	2½	27	1914	Shapoorji Godbole & Co.	A
Ellechpur-Yeotmal	2½	118	1913	Killick Nixon & Co.	A
Futwah-Islampur	2½	27	1922	Martin & Co.	F
Godhra-Lunavada	2½	25	1930	Killick Nixon & Co.	A
Howrah-Amta	2	44	1897	Martin & Co.	D
Howrah-Sheakhala	2	20	1897	Martin & Co.	D
Jacobad-Kashmor	2½	76	1914	Forbes Forbes Campbell & Co.	A
Jagadhri-Light	2	3	1911	J. L. Ry. Co.	G
Jessore-Jhenidah	2½	37	1913	Jhenida Lt. Ry. Syndicate	G
Kalighat-Falta	2½	26	1917	McLeod & Co.	F
Khulna-Bagerhat	2½	20	1918	E. B. R.	A
Kulasekarapatnam Light ...	2	27	1915	Parry & Co.	G
Larkana-Jacobabad	2½	53	1922	Forbes Forbes Campbell & Co.	A
Matheran Light	2	13	1907	Matheran Steam Tramway Co.	B
Mayurbhanj	2½	71	1905	B. N. Ry.	A
Nadiad-Kapadvanj	2½	28	1913	Killick Nixon & Co.	A
Pachora-Jamner	2½	35	1918	Shapoorji Godbole & Co.	A
Pulgaon-Arvi	2½	22	1917	Killick Nixon & Co.	A
Shahdara-(Delhi) Saharanpur ...	2½	92	1907	Martin & Co.	B
Tezpore-Balipara Light ...	2½	20	1894	Kilburn & Co.	D
Tirupati-Tiruchanur Light ...	2	3	...	Kilburn & Co.	G
Trivellore Light	2	2	1921	T. N. Chetty & Sons	G

Total route mileage 1,549
Average route mileage 43

A = Branch line company under rebate terms.
B = Company subsidised by Government of India.
C = Company subsidised by Provincial Government.
D = Company subsidised by District Board.
E = Company subsidised by Indian State.
F = Branch line company under guarantee terms.

G = Unassisted Company.

It will be seen that the Company-owned lines are operated under various conditions, regarding which a few words of explanation may be given.

A.—Branch Line Companies under rebate terms.

In 1925 the Railway Department of the Government of India published a Resolution on the subject of the financing of branch lines of railways. This Resolution states that branch and feeder lines are constructed under an agreement whereby the State either guarantees a minimum return on Capital (see F below), or alternatively "undertakes that the line shall receive out of the earnings of the main line from traffic contributed by the branch, such a sum, known as a rebate, as will make up the total earnings of the branch to a given sum, while the branch in each case shares with the main line any profit exceeding the guaranteed minimum." This scheme was evolved at the end of last century, when Government was unable to provide capital ; but the Acworth Committee damned it very thoroughly, and in consequence the Government decided to abandon the policy and to reduce the number of Branch Line Companies. "If on any occasion the Government of India should be unable to find funds for construction . . . . . and should it be considered advisable to tap fresh sources for subscription to railway loans by offering terms different from those given to the ordinary Government loans, that is, by offering not only a fixed rate of interest, but a share in the profits of a particular Branch Line, there appears to be no particular advantage of using a financial halfway house specially to float a loan on such terms ; there appears to be no reason why the Government should not float the loan direct." This is a very fair sample of official journalese, but what it means is that if, in future, any branch lines are to be built, Government will either do its own building, or at least supply the necessary funds.

B.—Companies subsidised by the Government of India.

There are four of these—Barsi, Shahdara-Saharanpur, Dehri-Rohtas and Matheran ; and the conditions for the first two are:—

I. Barsi—receives land only from Government, but no financial aid, all profits going to the Company. Government may determine the contract in 1944 or 1954, and if it does so shall pay to the company in England in sterling a sum such as, when added to any unspent capital, shall amount to the total paid-up capital expended with the authority of the Government.

II. Shahdara-(Delhi) Saharanpur—receives land only from Government. The Local Government (U. P. A. & O.) provide free land sufficient for a single 5′-6″ track, with land for all works and conveniences ; together with the use of portions of the local roads. The Local Government give no financial guarantee but take half of the profits in excess of 4% on the paid-up capital. The Local Government may determine the agreement at certain intervals (the next being 1934) and can then buy the line, paying to the Company the value calculated at 25 years' purchase of the average annual profits for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25% in excess thereof.

C.—Companies subsidised by the Local Government.

Darjeeling-Himalayan—Government land and the use of the cart road are given free: other land if necessary is acquired by Government and transferred to the Company at cost price. The Government to pay enough to make the gross receipts up to Rs. 2 lakhs annually. Half the net profits in excess of 5% are applied in repayment to the Government of the amount spent on maintaining the cart road during the year, or in making good the deficiency in gross receipts. Government may take over the line at 10 year intervals (next date 1939) paying its value as a dividend-earning investment *plus* a bonus of 20%.

D.—Companies subsidised by District Boards.

A typical example of these is the Howrah-Amta. The District Board grant free use of the side of the Board's road, and agree to pay such sum as may be required to make the net profits equivalent to a dividend of 4%, subject to a maximum payment of Rs. 1,100 per annum per mile, or Rs. 28,000 per annum. Profits in excess of 4% are

shared equally between the District Board and the Company. The District Board may purchase the line at stated intervals (next date 1937), the price being the value of the line as a dividend-earning investment, together with a bonus of 20%.

E.—Company guaranteed by an Indian State.

The Bangalore-Chik Ballapur was floated by an Indian Company under a guarantee, from the Mysore Durbar, of 4% per annum on the subscribed capital. The Company failed to raise the entire capital, and the Mysore Durbar then subscribed the balance as joint owners, the Company retaining the option of repaying the amount later on.

F.—Branch Line Companies under guarantee terms.

The Burdwan-Katwa is typical of this group. Government provides land free. When the net receipts are not sufficient to pay interest at $3\frac{1}{2}$% on the capital, the Government makes the amount up to this figure; if the net receipts are not over 5% they go to the Company, and any excess over 5% is divided equally between the Government and the Company. In 1946, or at 10-year intervals thereafter, Government can purchase the line, paying 25 times the average net earnings of the preceding 3 years.

G.—Unassisted Companies: These need no explanation.

It is interesting to examine the financial results of the various lines, in order to form some opinion of the advantages, from a purely monetary point of view, of the different methods of ownership. The table below gives the average figures, for the three years 1930—33, of—(*a*) the percentage of net earnings to total capital outlay, and (*b*) the operating ratio, or percentage of working expenses to gross earnings. It should be pointed out the total capital outlay is not the same thing as the issued capital.

I. State-owned lines.

	(A) Return	(B) Ratio
B. B. & C. I.	1.3	83.99
Dharwa-Pusad—No separate statistics.		
E. B. R.—No separate statistics.		
Jorhat	1.8	105.96
Kangra Valley	1.7	172.40
Kalka-Simla	0.1	98.87
Kohat-Thal	8.3	392.32
Morappur-Hospur ...	0.3	152.14
Purulia-Ranchi	0.3	96.95
Raipur-Dhamtara ...	1.3	87.72
Satpura	1.6	128.87
Tirupattur-Krishnagiri ...	2.7	129.46
Trans-Indus (Commercial) ...	5.0	174.09
Trans-Indus (Military) ...	2.9	275.72
Tumsar-Tirodi—No separate statistics.		
Zhob Valley	7.7	384.55

II. Indian state-owned lines.

Bodeli	3.0	70.31
Cutch	4.5	56.38
Dholpur	4.0	60.58
Baroda	1.5	79.06
Gwalior	2.0	71.03
Kolar	1.0	85.05
Parlakimedi	5.7	40.94
Piplod	4.0	51.69
Rajpipla	3.8	70.45
Tarikere	1.6	64.85

III. Company-owned lines.

Arrah	4.9	71.95
Ahmadpur	3.8	95.22
Bankura	3.8	118.98
Bangalore	1.0	85.57
Baraset	4.7	79.06
Barsi	3.9	64.20
Bengal Prov.	2.6	67.29
Bukhtiarpur	6.1	70.28
Burdwan	3.7	82.16
Champaren	0.8	124.84
Darjeeling	8.3	70.42
Darjeeling Extensions ...	2.3	68.05
Dashgara	1.7	67.29
Dehri	5.2	66.55
Dhond	5.9	45.00
Ellichpur	5.3	45.00
Futwah	4.5	75.48
Godhra	0.9	87.77
Howrah-Amta	8.2	73.76
Howrah-Sheakala ...	4.4	82.34
Jacobabad	4.0	45.00
Jagadhri	1.0	87.65
Jessore	0.9	116.57
Kalighat	3.5	92.45
Khulna	6.6	45.00
Kulasi Karapatuam ...	4.4	80.02
Larkana	3.8	45.00
Matheran	1.4	83.34
Mayurbhanj	3.1	40.94
Nadiad	1.2	89.02
Pachora	2.4	45.00
Pulgaon—included with Ellichpur.		
Shahdara	9.1	47.79
Tezpore	8.6	75.33
Trivellore	...	150.00

The average figures are as follows:—

State lines	2.3%	175.61%
Indian state lines ...	3.0%	65.03%
Company lines	4.0%	76.69%

If the Kohat, Zhob and Trans-Indus (military) lines are excluded, the State line figures are—1.1% and 123.05%. The comparative results for the three years 1927—30 were:—

State lines	1.4	99.58
Indian state lines ...	3.3	64.89
Company lines	4.9	75.74

There may, of course, be local conditions other than ownership which affect the results: but a study of the above figures certainly tends to show that nationalisation is certainly not financially advantageous. The cry for nationalisation of the railways has not been very loud during recent years, perhaps owing to the general depression; but one never knows when it will be raised again, and it is as well to bear the figures in mind. It is a little difficult to understand

why the clamour has been for state ownership of railways while no one appears to have suggested the nationalisation either of road services or of steamer lines. Why should rail transport be singled out for this doubtful privilege?

Most of those who read these pages will be interested in the light railways more particularly from an investment point of view, and the following table, therefore, gives the average dividend paid during the three years 1930—33, the current (July, 1934) market price, and the yield:—

Company		Dividend	Par	Price	Yield
Ahmadpur	...	3 3/4	100	82	4.6
Arrah	...	4	100	57	7.0
Bankura	...	3 7/16	100	81½	4.2
Baraset	...	4	100	57	7.0
Bukhtiarpur	...	4 11/16	100	61	7.7
Burdwan	...	3 1/2	100	82	4.3
Darjeeling	...	8	100	60	13.3
Dehri	...	5 5/12	10	11½	4.7
Dhond	...	5 5/12	100	87	6.2
Futwa	...	3 1/2	100	81½	4.3
Howrah-Amta	...	5 1/2	100	88½	6.2
Howrah-Sheakala		4 1/3	100	58	7.5
Kalighat	...	3 1/2	100	81½	4.3
Larkana	...	4 1/6	100	107½	3.9
Mayurbhanj	...	3 5/6	100	58	6.6
Pachora	...	4	100	82¼	4.9
Shahdara	...	7	100	132½	5.3

These figures do not sound unattractive, particularly when it is considered that as trade recovers from the depression, rail traffics will increase, and it is reasonable to hope that dividends and market prices will also rise.

But it is necessary to sound a note of warning. It is true that there have been signs of a lifting of the depression and that there has been some improvement in railway traffics: but the railways, and especially the light railways, are not yet by any means out of the wood. Bad trade is a temporary evil, but there are other difficulties to be faced, the worst of these being the competition from road services. These road services enjoy many advantages which need not be enumerated here, and until recently the Indian Railways were powerless to fight against them. The railways are governed by the Indian Railways Act, which was evolved in 1890, when motor cars were very much in their infancy, and no one foresaw that they would develop into the present day menace. In that respect the Act was entirely out of date, and it was not until 1933 that any alteration in its provisions was made. Section 51 of the Act authorised railways "to provide and maintain any means of transport which may be required for the reasonable convenience of passengers, animals or goods carried or to be carried on the railway." The effect of this was that railways, with the sanction of the Railway Board, could operate road services as feeders to their rail services, but could not operate road services alongside their rail services. That is to say, if a railway had a track running between two points A and B, it was forbidden to run a parallel road service between A and B, because the road traffic was not "carried or to be carried" by rail. Many of the narrow gauge railways in India have their alignment along the sides of District Board roads, and there is therefore an opening for direct competition between road and rail, mile by mile, over the entire route. The local authorities could issue licenses for road services to be operated on such roads to any applicant *except the railway company*, and the railway had no means of meeting the competition. Motor buses are speedier than narrow gauge trains, they can pick up and put down traffic at any point on the route, they are to a great extent free from the local taxation which can be a heavy burden on railways, and they are subject to much less strict supervision and control as regards standard of maintenance, treatment of staff, legal speed limit, and legal carrying capacity.

This state of affairs was obviously unjust, and to remedy matters a Bill to amend the Railway Act was introduced in the Legislative Assembly in 1933. The express purpose of the Bill was to alter Section 51 of the Act in such a way that the railways would be enabled to operate road services on exactly the same footing as other road service owners ; the resultant Act, which was born after considerable pre-natal pains in the Assembly and in Committee, is not a very stout child. If Mr. Blank or Babu Koihai wishes to run a road service, he goes to the local authorities, gets his license, and runs his buses. If a railway company wishes to run a road service, it has to apply for sanction to the Railway Board, the Railway Board has to consult the Provincial Government, the Provincial Government has to consult the local authorities, who have to consult the village chowkidar, who has to consult the elephant in the zoo, who has to consult the man in the moon: and after about two years somebody may say yes or no: and if that can be called "an equal footing" then the Ochterlony Monument is made of green cheese.

In the summer of 1932 the Managing Agents of the various light railways in India addressed a letter to the Government of India setting forth their grievances. The Government replied that they were about to send out two doves—Messrs. Kirkness and

Mitchell of the Railway Board—who would survey the floods and endeavour to find any peaks of land which might be appearing above the submerging waters. In due course, these gentlemen submitted an elaborate and exceedingly valuable report, containing a number of admirable suggestions. This report, on the basis of which the whole problem could have been settled in a few weeks, is now presumably collecting dust and feeding the white ants on the shelves of the Railway Board office.

Early in 1933 a Road-Rail Conference was convened in Simla. Representatives of the Central and Provincial Governments, of the railways, the road users, the tinkers, tailors, soldiers, sailors, and everybody else, met and talked, and talked, and passed a number of highly interesting resolutions—which are still being discussed and written about and (perhaps) studied by the central and provincial governments. Meanwhile the road services continue to steal traffic from the railways (in many cases at the expense of Government and the District Boards) and no real effort of any kind has been made to ensure that the road services are efficiently supervised and operated, or to arrange that the two competing forms of transport may continue to exist on a sound financial basis and without cutting each other's throats. Possibly the official plan is that this delay, if sufficiently protracted, will automatically settle the problem by causing the death of one of the rival parties.

PUBLIC UTILITY SECTION:

HYDRO-ELECTRIC DEVELOPMENT IN INDIA

Electrical development in India, unlike most other phases of our national economy, is as important for what has so far been achieved as for what yet remains to be done. The material progress of India's millions unquestionably requires a vast industrial development commensurate with the scope which this country offers. But India is not adequately endowed with coal, the traditional force of power, or its later rival, oil. While for other countries electrical development would be more of an improvement suggested by the progress of science, for India electrical development would be the sole and indispensable condition of economic progress. This is as much as saying that before the development of electricity and the invention of the various uses to which it is now put, industrial progress in India would have seemed less feasible than it does to-day. It is necessary to dwell on this point as there is a tendency to regard the vast hydro-electric schemes that have been completed and that are still in progress as more the concern of electrical engineers and other technicians than a point of vital importance to the well-being of the average man.

Electrical development is affected both by the establishment of large public utility companies in big industrial areas, and also by taking advantage of the water power available in an area to institute large hydro-electric schemes. The latter enables the distribution of current over large areas at comparatively small cost. Though the institution of such schemes requires the outlay of big amounts, once the schemes are instituted, progress is heady and conditions of all-round improvement ensue without delay. But the former is dependent upon a number of conditions which are not satisfied easily. Development through the activities of isolated joint stock companies necessarily means that progress can be attained only when the conditions generally favourable to joint stock enterprise are present. Though there are periods of boom it is rarely, if at all, that a substantial part of the available new capital flows into one particular direction. Besides, as electrical companies have to depend not so much on the demand for the amenities of civilised urban life, as on the needs of industries for power, it will be a long time before the smaller towns or the rural areas can secure electric current on anything like a fair rate.

It will be seen from the above analysis that electrical development of the first of the two kinds mentioned has to be slow, meagre and unsatisfactory. The big industrial cities have naturally been the first to have electric supply companies in their midst facilitating both the processes of industrial production and also the domestic conveniences of the inhabitants of those areas. It would hardly be possible, nor indeed would it be useful or necessary to trace the development of electric supply companies over India's urban areas. In a sense, they are rather the result, than a potential cause of industrial activity. The hydro-electric schemes, on the other hand, have the merit of producing conditions for which the ordinary joint-stock companies would only have to wait. It is fortunate that among the many gifts that nature has lavishly bestowed on this country, water power is by no means the least. In the hilly tracts of India are gigantic falls which lend themselves admirably to their utilisation in hydro-electric projects. The projects, too, can be of such vast dimensions that the neighbouring plains are afforded the full share of their benefits. It follows from this, that those regions which are very distant from hilly tracts and the source of big river systems, have to depend on the slower and more prosaic process of electrifying themselves. From the point of view of hydro-electric development, those which are most fortunately situated are in their

order of importance, Bombay, Mysore, Southern and South East India, the U. P. and the Punjab ; and the other parts of India are in this respect less fortunate.

The credit for pioneering in hydro-electric schemes goes to the Mysore State which harnesses the Cauveri falls to the purpose of generating electric energy for domestic and industrial consumption throughout the State. This project is the oldest in conception, in execution, and in development. It is also unique in the great blessing it has conferred upon the large population. The idea of utilising the Cauveri falls is reported to have been mooted first in 1894 when attention was drawn to the possibility of long distance transmission of power. Further investigations afterwards followed. But the credit of giving single-minded devotion to the task of bringing it to fruition despite all the obstacles of the day, belongs to the Indian statesman, Sir K. Seshdari Iyer, the famous Dewan of Mysore. In 1899 the decision was reached by the Government to utilise the fall for the production of electric power to be transmitted to industrial undertakings in different parts of the State including the Kolar gold mines. The primary consideration was that industrial enterprises throughout the State would get the supply of cheap motive power. The preliminaries consisted in acquiring from the Madras Government the right to use the whole of the water power. The falls occur in the river Cauveri which at this point forms the boundary between the Mysore State and the Coimbatore district, where the stream forms the famous island of Sivasamudram. The river has falls on both its branches, the British side being known as Bar Chakki and other side as the Gangana Chakki. The head works are about two miles above the falls and as in all similar cases the water has to be diverted by means of a masonry dam 9 ft. high and 2,400 ft. long across the river. The flow is of course controlled by suitable gates. The generating station is situated in a place where are located the control gates for regulating the flow from the penstock and pipe lines conveying the water to the turbines. Two parallel channels about three miles in length conduct the water to the forebay above the generating station. The capacity of the channel is 1,200 cusecs. But the full capacity will be utilised only when the growth of the demand for power warrants it. A silt reservoir with a capacity of five million cubic feet is also provided to ensure that water going into the turbines is free from silt. The average power generated during the month is 14,310,000 B. T. units. The power is generated at a voltage of 2,200. The principal consumers of the power are the Kolar gold mines which are 92 miles away, Bangalore at a distance of 60 miles and Mysore, 37 miles. The Mettur project in the Madras Presidency also during the construction got its supply of electric power from the Mysore hydro-electric works.

No account of the Mysore project would be adequate or complete without a reference to the provision of storage reservoir at Krishnarajasagara which enables the flow of water available at any time to be reserved and regulated according to the needs of the moment. The vast difference that it makes will be seen from the fact that during the dry weather the flow of the Cauveri at Sivasamudram does not exceed 100 cusecs; but with the storage it is possible to have 900 cusecs. Penstock pipes are provided in the reservoir dam to enable an increase in the supply of electricity generated at Krishnarajasagara according to the requirements. The Krishnarajasagara dam is 8,600 ft. in length and 124 ft. high above the river bed. The catchment area is 4,100 square miles and the storage capacity is 44,827 million cubic ft. The water spread is 49.5 square miles. Among the advantages of the storage reservoir is the possibility of bringing a higher area of land under irrigation than has been possible till now in a country subject to frequent drought.

The advantages that have flowed from the hydro-electric project in Mysore can be appreciated even by a casual visitor to that State. It may be generally stated here that as a result Mysore is one of the foremost industrial states of India. The State itself has initiated a number of industrial enterprises which are yielding an annual revenue of about Rs. 30 lakhs. The amenities of civilised life like electric light, etc., are available to the most obscure parts of the State and at a rate which compares most favourably with the rates elsewhere in India and the world.

Next to the Mysore project in the order of chronology but far more spectacular from every point of view is the hydro-electric enterprise projected by the Tatas and intended to exploit the possibility, from this point of view of the Western Ghats. The Tata Hydro-Electric scheme embraces three companies, namely, Tata Hydro-Electric Power Company, Andhra Valley Power Company and Tata Power Company. The three companies are alike in various ways; and through the various links between them

they must be considered as a single unit. Taken together, they take the first place in India as the most gigantic hydro-electric power scheme. Possibly, they constitute the world's biggest hydro-electric project. The capital scheme of the three companies involved Rs. 16½ crores; and the block expenditure comes to Rs. 16 crores. Among the many marvellous achievements of the Tata House in regard to the pioneering of industries in India, the hydro-electric projects are not the least notable. The power generated by the three-Companies is utilised for the electrification of a section of the B. B. and C. I. Rly. and the G. I.P. Rly. and by most of the cotton mills in the Bombay island. The Bombay Electric Supply & Tramways Company, which has the monopoly for the retail supply of electrical power in the City of Bombay, takes power in bulk from the Tata Companies. Even after meeting all these demands, the productive capacity of the three projects is not utilised to the full. The Kalyan power scheme of the G. I. P. Rly. was a needless outlay on the part of the railway administration; and the cost per unit to the railway from the working of the Kalyan power station is higher than the rate at which the G. I. P. buy part of their requirements from the Tatas. There can be no doubt that the Kalyan power station was a needless duplication of effort, while without that effort and outlay, the railway would have secured power cheaper. Owing to the prevalent trade depression, there has been no expansion in the consumption of electrical power. In the result, the Tata Hydro-Electric Companies are working, and may have to continue to work, only to partial capacity. These projects have been a tremendous success not only as engineering enterprises; the shareholders have been in receipt of satisfactory dividends in the case of the two companies started in the earlier years, while the Tata Power Company, the last of the trio is now on a dividend-paying basis.

Madras, though lagging behind the other provinces in respect of general industrialisation, promises to go ahead in the future. The hopes are based solely on the possibilities that are being opened out by the Pykara Hydro Power Scheme. The main engineering features of this scheme are briefly summarised: The Pykara River rises on the slopes of the Mukurti Peak, 12 miles due west of Ootacamund, the summer headquarters of the Madras Government and after a winding course of about 15 miles on the Nilgiri Plateau, it plunges down to the plains below in two falls, 180 and 200 feet. A total drop of over 4,000 feet is taken within a few miles and thereafter the river becomes known as the Moyar which, skirting the foot of the Nilggiri Plateau on the north, eventually joins the Bhavani. The 4,000 feet difference in level, between the edge of the plateau, where the main falls begin and the Moyar River at the foot of the plateau, is the head available for development. Initially it is proposed to utilise only the first 3,000 feet under the name of the Pykara Scheme and when the demand for power increases, the lower 1,000 feet will be developed with the name of Moyar Scheme. Full investigations show that the Pykara River is capable of producing 100,000 horse power, although it would be many years before the demand can develop to that extent. The scheme as now sanctioned is for developing a maximum of 21,000 horse power for the Nilgiris and Coimbatore districts only. As the demand increases additional reservoirs will be constructed on the plateau for storing larger quantities of water, until the full possibilities of the site, namely, 100,000 horse power are brought into use. The designs have been so drawn up that a minimum of capital is, at any time, kept locked up on unproductive works or equipment but flexible enough to admit of extensions at a minimum of cost. The catchment area which is to be utilised is about 38 square miles in extent and receives an annual rainfall averaging about 105 inches. The highest floods known have been in July, the river discharging more than 20,000 cusecs, and the lowest flow observed has been in May, being only 15 cusecs. It is apparent that a certain amount of regulation of the river by storage is necessary before continuous power can be generated. The catchment has, fortunately, several suitable reservoir-sites; and for this reason the Pykara Scheme is considered a very flexible and attractive development. Additional storage can be obtained at any time, to cope with an increase in power demand, by constructing a series of dams one after another.

The waters of the Pykara will be diverted by a small dam constructed across the river about a mile above the main fall and an aqueduct 7,000 feet long will convey them to a forebay on the edge of the plateau. They will be supplemented by another and an independent supply from a reservoir formed by a dam across the Glen Morgan stream. The effective storage provided will be about 84 million cubic feet and this will serve all purposes for a number of years.

From the forebay the water will be taken

through a pipe 78 inches in diameter of riveted steel which lower down branches into high pressure penstock pipes varying from 27 inches to 21 inches and these will carry the water down the hillside to the power house 3,000 feet below. These pipes will have a length along the slope of about 10,000 feet and in the lower portions where the water pressure will be very high, the pipes will be made of special steel and it may be necessary to further reinforce them by steel bands. For this reason the scheme will be unique in India and it is believed that there are only four schemes in the world where higher heads have been developed. The cost of these pipes along with their supports when erected will be about Rs. 18 lakhs. A permanent haulage track will be laid alongside the pipes to convey men and material between the top and bottom of the plateau. The penstock pipes end in a manifold, from which water will be led into three generator units, each of 7,800 k. w., maximum rating. One of these will be spare for use in emergencies.

Power will be generated at 11,000 volts and transformed up to 66,000 volts for transmission to Coimbatore. It is proposed to instal high tension transformers outdoors, and when the demand for power increases, more turbo generators will be installed and the transmission raised to 1,10,000 volts.

The power generated at Pykara will be transmitted to different centres of consumption by high voltage overhead lines. A double circuit 66,000 volts line (50 miles long) will carry power to the Coimbatore sub-station and branch lines at 22,000 volts will radiate from this sub-station to the other centres in the district such as Tirupur, Pollachi and Anamalais. The Nilgiris District load will be catered for by branch lines from the Pykara Power house itself. The principal users of power would be the cotton mills at Coimbatore, Tirupur and Pollachi, who are expected to take more than half the output. A large proportion would also be used by the tea estates in the Nilgiris and Anamalais. The rest of the power will be for the lighting of towns and supplying small factories, flour mills, ginning mills, rice mills, etc. Also, it is expected that the South Indian Railway may have, at least, a portion of their Nilgiris Section electrified and their stations in the districts near the power lines lit up by electricity.

No account of hydro-electric development in India will be complete without a reference to the provisions for the generation and supply of electric power in the Mettur Irrigation project, which will be complete by the end of August 1934. The Mettur project is no doubt primarily an irrigation project aimed at the storage and regulation of the waters of the Cauvery, which run irregularly owing to the vagaries of the two monsoons, both of which feed this South Indian river. Like most modern works of this nature, the Mettur dam is adaptable to the policy of combining irrigation benefits with hydro-electric facilities and a maximum of 49,000 horse-power could be obtained, the minimum depending upon the conditions in each summer. Provision is made to facilitate the installation of four turbines operating under a maximum head of 150 ft., the requisite intake pipes etc. having already been fixed in the body of the dam.

The hydro-electric scheme of the United Provinces is unique in that it serves a purely agricultural area without counting on the concentrated demand for energy which usually forms the nucleus of any large system of electrical supply. The United Provinces has a large area in which agricultural land is denied the advantage of natural gravity canals. The water supply has perforce to be by pumping from rivers, tube wells and the large open wells. The possibility of placing at the command of the average cultivator a certain volume of cheap electrical energy which he might utilise for the purposes of pumping water from the wells and other sources which cannot be made to reach the fields by the ordinary force of gravity suggested the installation of a hydro-electric supply. In the earlier stages doubts were felt whether it was safe to attempt to utilise the waters of the Upper Ganges canal for the purpose of a hydro-electric project. For, unlike the Pykara or the Sivasamudram falls it was not a case of utilising waters running to waste to far more productive purposes. In the United Provinces, the failure of an attempt on the Upper Ganges canal might mean damage to a canal system which by itself was a large asset securing to the State an average annual revenue of Rs. 62 lakhs. With the general advance of engineering the scheme became more and more feasible.

The river supply at the head works at Hardwar varies according to the various seasons from 8,000 cusecs, the full capacity of the channel, to 5,000 cusecs. "The difference in the level intercepted between the slope of the canal which averages 1 foot per mile and that of the country is absorbed by a series of 13 vertical falls decreasing in height from 12 feet at the head to 6 feet near the tail. The total electric power available at the 10 falls which have been found

suitable for power development is about 3,400 K. W. or 47,000 h.p., of which about 13,000 h.p. is now being developed by means of the project under review in addition to 2,000 h.p. of oil-engine stand-by reserve."

It would be appropriate to sketch briefly the growth of the whole scheme. In 1927, a construction power station which was formerly at mile 7 of the canal was remodelled and adapted for giving power to the Hardar group of towns and to Roorkee. This station has now been abandoned and absorbed into the extended network. In 1928, two schemes were undertaken at the Bhola and Palra Falls. At the former were installed 4,500 h.p. turbo generator with a head of 14 feet together with a 400 h.p. local reserve oil set. The station has now been linked with the general transmission system. At Palra 300 horse power Kapla type sets were installed to supply power to Kurja and also pump cusecs from the Kali Nadi. The Ramganga scheme was a later idea and its purpose was to generate 4,000 horse power at the Bahadrabad Falls and utilise the energy by 220 miles of h.t. transmission lines for electrifying 11 districts. 200 cusecs of water were also to be pumped by means of electricity from the Ramganga river to a height of 36 feet at 590 miles away from the power station. This was to irrigate 50,000 acres of fertile land for which no ordinary scheme of irrigation would avail. The total estimated cost of the combined electrical and irrigation project was Rs. 47½ lakhs. The distribution of power in bulk is made through the agency of commercial companies with adequate resources to supply a smaller district. The probable future development of the scheme may be understood from the fact that the first stage of the development will be loaded up for 5 years and that thereafter it will be necessary to continue electrification at the rate of 1 fall per year so that 1941 will see the scheme in full completion. The ultimate capacity will then be 33,400 K. W., of which 26,500 K. W. will be constantly available plus 1,000 K. W. of oil-engine reserve.

The Uhl river project of the Punjab was first conceived after a complete hydro-electric survey of the Province in the year 1921. The Electricity Board advised the Government to concentrate on it to the exclusion of rival schemes.

A description of the scheme with an emphasis on the more difficult aspects thereof will not only explain the delays which aroused popular criticism but also give an idea of the extent to which nature has been conquered in the service of man's material needs. The river Uhl flows in a valley which is 6,000 feet above sea level. It is divided from the Kangra Valley by a ridge which is 9,000 feet high and more or less completely inaccessible. The purpose of the whole scheme is to take the waters of the Uhl and its tributary to the Kangra Valley. As it is out of the question to take the waters round the ridge, the only alternative is to drive a tunnel through the ridge. It will be seen from this that the head-works are to be situated in the Uhl Valley where the River of that name is joined by its tributary. The pipe lines of the power house are situated in the Kangra Valley; and the water is to be carried through 2¼ miles of concrete lined tunnel of more than 9 feet in diameter. From the mouth of the tunnel at the Kangra end, the water is dropped through steel pipes 1,800 feet down to the power house. The distribution of electricity will be done by means of transmission line carried on steel tunnels from the power house at Jogindernagar. The building of a dam nearly 270 feet high across the gorge through which the Uhl passes enables a tenfold increase in the pressure of the pipeline. It is also intended to construct a second power house below that in the Kangra Valley conveying the water through another pipe-line and dropping it another 1,200 feet in order to secure the requisite pressure. The details of the execution of the project are matters of the highest engineering interest; and rendered in non-technical and more vivid language, it may be a thrilling tale from which school children might imbibe a romantic love of engineering. But here we must content ourselves with pointing out that all the difficulties have been ultimately surmounted, and it is now certain that the scheme will before long shower its benefits on the people of the province.

TRANSPORT SECTION:

RAILWAY AND RAILWAY FINANCE

I. HISTORICAL.

Indian Railways have been constructed either by the State or by private Companies. On completion of construction, they have been worked either by the State or by the Company which originally built them, or have been handed over to another Company to work. Several of the railways originally owned by Companies have been purchased by the State. Some of these purchased railways are now worked by the State ; for example, the Sind, Punjab and Delhi Section of the North Western Railway. Some of them, as in the case of the Bombay, Baroda and Central India Railway, have been handed back to be worked by the Company which originally constructed them. Some, on purchase, have been handed over to other railways to work under contract ; thus, parts of the old Madras Railway were handed over to the Madras and Southern Mahratta and South Indian Railways to work. The Nagda-Muttra Railway was built by the State, but has since been incorporated in the Bombay, Baroda and Central India Railway and is worked by that Company as a part of its system. The Delhi-Umbala-Kalka Railway, which was built by a Company of that name, has since been purchased by the State and is worked by the North Western Railway. Similarly, the Southern Punjab Railway Company which had entrusted the working of its undertakings to the North Western Railway, has been purchased by Government.

The East Coast Railway was originally constructed and worked by Government as a famine-protective line, but its northern and southern sections were subsequently made over to the Bengal-Nagpur and Madras Railway Companies, respectively, to work as part of their systems. The Hyderabad-Jodhpur Frontier Section of the Jodhpur Railway was constructed by Government and handed over for working to the Jodhpur Railway which belongs entirely to an Indian State. The Bezwada Extension is in the same way worked by the Nizam's Guaranteed State Railway Company. The terms on which one railway works another are in all cases, except where a purchased railway has been absorbed entirely in a State Railway system, incorporated in a contract. Hardly two of these contracts are alike in every respect. It is impossible to set out the differences arising out of the varying terms of the contracts, or to take account in every case of the histories of the railways since construction.

II. FINANCING BRANCH LINES.

Railways fall under two main categories:—

(*a*) those in which Government has a capital interest,

(*b*) those in which it has not.

The second class comprises for the most part the branch line companies formed before the introduction of the present policy of financing branch lines referred to below. Generally, the main financial conditions of the contracts with such Companies are:—

(1) the provision of land by Government free of cost to the Companies ;

(2) financial assistance in the shape of a firm guarantee of $3\frac{1}{2}$ per cent. on the capital, or a rebate out of the net receipts of the parent system accruing from "interchanged traffic," sufficient to make up, with the net earnings of the branch, an amount equivalent to 5 per cent. on the capital ; and

(3) equal division between Government and the branch line company of surplus profits over and above 5 per cent.

A number of small railways in India have been constructed by Companies on these terms. The financing of such railways falls outside the Government programme of railway construction, the capital transactions appearing in the accounts representing merely the receipt and payment of deposits. The value of land is charged to Government

as Railway Revenue expenditure outside the accounts of the Company. Similarly the Government share of the Surplus Profits of the railway in excess of 5 per cent. is credited as a Revenue receipt. In each case in which Government gives a direct guarantee, there is a liability in respect of interest, and if Government were to make a payment under this liability it would figure in the accounts as Government expenditure on the railway.

The various ways in which the Branch Line Companies finance themselves are—

(1) by the issue of share capital,

(2) by the issue of debentures,

(3) by temporary loans (including cash credits) from banks or from the Managing Agents of the lines ; and

(4) by temporary advances from Government.

Under their contracts with Government the conditions for the raising of fresh capital are always subject to the approval of Government.

The rate of interest at which these companies are able to borrow has an important effect on railway revenues, for, under the contracts, Government are liable to make up to the Branch Line companies under certain circumstances the difference between their net earnings and a fixed return on the capital invested by them, and the interest paid on loans by the Branch line companies is generally to be deducted from the net earning of the lines before such return is calculated. It happens that in many of these cases at present the net earnings after meeting the interest on loan are insufficient to yield the guaranteed return on capital and Government becomes liable to make up the difference. It is obvious that in such cases any reduction in the rate of interest payable on present loans or for fresh capital would mean a definite reduction in the loss to Government.

The loans already raised by these Branch Line Companies are generally either in the form of—

(*i*) debentures on which interest is payable at a comparatively high rate, which in some cases can be repaid immediately or in the near future ; or

(*ii*) cash credits or other temporary advances which can be converted into regular loans at any time.

In the first case steps have, in the current year, been taken by Government to endeavour to reduce wherever possible the rate of interest payable on loans which the Company has the option to terminate immediately or in the near future, but in both classes of cases, it has happened that it is not possible for the Company concerned to obtain the funds required at a lower rate. On the other hand Government have been in a position to borrow money at more favourable rates and in certain cases it has become advantageous for Government to make advances temporarily to these Companies from their resources.

III. NEW BRANCH LINE POLICY.

The advances that were made during the year 1933-34 were:—

1. Rs. 7½ lakhs to the Futwa-Islampur Railway to replace cash credits bearing interest at 6 per cent. per annum.

2. Rs. 1½ lakhs to Chaparmukh Silghat Railway to replace cash credits bearing interest at 6 per cent. per annum.

3. Rs. 3 lakhs to the Kalighat-Falta Railway to replace 6½ per cent. debentures which are redeemable on 12 months' notice from any date after September, 1933.

The advances have been made on the following terms and conditions—

(*i*) that the advance will carry interest at the rate of 5 per cent. per annum which will be a first charge on the net earnings of the line ; and

(*ii*) the advance will be for a period of three years in the first instance after which it will be subject to reconsideration and will be liable to recall thereafter at any time on six months' notice.

According to the arrangements thus made a saving of 1 per cent. interest on the advances in the first two cases and 1½ per cent. on the advance in the last case have accrued entirely to the advantage of Government. The total saving involved is Rs. 13,500.

The advances have been made from the Railway Depreciation Fund. It is recognised that it is not desirable to adopt generally a policy of investing any considerable part of the Depreciation Fund balances in what may be regarded as a less liquid form of investment than would be the case if the ordinary procedure were adopted which is, in effect, to keep the balances as a deposit at call with the Government of India. But the amounts involved are relatively trifling. On the other hand, it is more appropriate that transactions which mainly benefit railway revenues should be made from railway resources as far as possible and not from other resources of the Government of India.

A new policy that had been introduced in 1924-25 for the construction and financing of branch lines also requires mention. Under this policy endeavours are to be made to

reduce by purchase the number of existing branch line companies and Government is to find the capital required for the construction of extensions of branches to existing main systems. The construction of any branch or feedeer lines not expected to be remunerative, which a Local Government might desire to have constructed for purely local reasons or administrative advantages, will be considered, provided the Local Government is prepared to guarantee the Government of India against the loss involved in the working of such lines.

IV. "COMPANY RAILWAYS."

The State has much greater immediate interest in those railways the capital expenditure on which has been provided wholly or mainly by Government. The main divisions of these railways are:—

A.—State Railways worked by the State.

B.—State Railways worked by Companies or by Indian States.

The second class comprises Railways towards the cost of which the working agents have contributed a small amount of share capital on which a definite rate of interest is guaranteed by Government and in respect of which they receive a share of the surplus profits after meeting all charges for interest on capital.

Both classes have been financed in the same way, through the Government programme, the funds for which are usually provided either from surplus revenues, or from loans forming part of the Public Debt of India, or from Debentures and Debenture Stock raised by the Working Companies.

The accounts of State-owned railways are therefore part and parcel of the Indian Government accounts, and railway finances are part of the general finances of India. But a convention was entered into in September 1924 by which it was agreed to separate railway finances from the general finances as a temporary measure.

V. THE SEPARATION CONVENTION.

It is nearly eight years since the resolution was adopted by the Assembly regarding the separation of Railway from General Finances. The resolution which is dated 20th September, 1924 ran as follows:—

"This Assembly recommends to the Governor-General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways:

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.

(2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by Companies and Indian States) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge, surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.

The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.

(3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.

(4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.

(5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily

from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.

(6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be *ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight selected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

(7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of railways shall then make a general statement on railway accounts and working. The expenditure proposed in the railway budget, including expenditure from the depreciation fund and the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the details it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.

(8) These arrangements shall be subject to periodic revision but shall be provisionally tried for at least three years.

(9) In view of the fact that the Assembly adheres to the resolution passed in February, 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railways to Company management is concluded against the advice of the Asssembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

"(*i*) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and

(*ii*) that the purchases of stores for the State Railways should be undertaken through the organization of the Stores Purchase Department of the Government of India."

The above convention appears to have been in the nature of a compromise between the Government and the Opposition at the time ; the Government gave the undertaking contained in sub-para. (9) of the first para. of the Resolution and the assurances contained in the second para., in return for the arrangements as set out in the first 8 paras that were considered necessary for railways to carry out a continuous railway policy untramelled by the political exigencies of finance to which general revenues could be regarded as subject.

Sufficient time has elapsed since the convention was entered into to allow of a retrospect being made in order to get a fairly correct grasp of the general tendencies that State railways have shown under the new arrangements.

VI. THE CONTRIBUTION TO GENERAL REVENUES.

From 1859 to 1898 (for forty consecutive years), the operation of Indian railways had not been a source of profit to the tax-payer. The deficits mounted up to 235 lakhs in 1894, 236 lakhs in 1872 and 266 lakhs in 1896. The total losses up to 1898 aggregated to the enormous sum of 57.80 crores and have had to be met by taxation. The tide turned however in 1899, and year after year there have been net gains (except in 1908 and 1921) which achieved a record of 15.85 crores in 1918.

The following statement shows the direct gain or loss (–) from the operation of railways yearly from 1858 up-to-date.

Year.		(In Lakhs of Rs.)
1858	...	–65
1859	...	–110
1860	...	–120
1861	...	–151
1862	...	–167
1863	...	–184
1864	...	–193
1865	...	–24
1866	...	–94
1867	...	165
1868	...	–193
1869	...	–162
1870	...	–193
1871	...	182
1872	...	–236
1873	...	–179
1874	...	–161
1875	...	–156
1876	...	–115
1877	...	–15
1878	...	–207
1879	...	–157
1880	...	–104
1881	...	–29
1882	...	–131
1883	...	–30
1884	...	–105
1885	...	–73
1886	...	–119
1887	...	–212
1888	...	–223
1889	...	–185
1890	...	–69
1891	...	–32
1892	...	–185
1893	...	–154
1894	...	–235
1895	...	–162
1896	...	–266
1897	...	–143
1898	...	–94

Year.		(In Lakhs of Rs.)
1899	...	11
1900	...	49
1901	...	127
1902	...	34
1903	...	129
1904	...	316
1905	...	300
1906	...	347
1907	...	236
1908	...	–186
1909	...	124
1910	...	303
1911	...	568
1912	...	721
1913	...	718
1914	...	324
1915	...	611
1916	...	1,122
1917	...	1,487
1918	...	1,585
1919	...	935
1920	...	564
1921	...	–910
1922	...	117
1923	...	121
1924	...	652
1925	...	1,301
1926	...	883
1927	...	736
1928	...	1,004
1929	...	643
1930	...	245
1930-1931	...	–624
1931-1932	...	–986
1932-1933	...	–1,080
1933-1934 (Revised)	...	–793

The steady and substantial surpluses that the railways have been yielding during the last 30 years have made people forget that till about 1910, *i.e.*, for over 50 years, the railways had been considered as more or less a commitment of Government in the interests of the administration of a large country and had been numbered amongst the benefits of British rule in India. Indian railways have been regarded as commercial undertakings of Government only during the last 2 or 3 decades, and the contribution to general revenues appears to be based on the idea that as the losses of the earlier years had been borne by the tax-payer, the gains of later years should reimburse him *pro tanto*. Otherwise, there is no reason why the total net gains should not have been applied *entirely* towards decreasing the charges for service and increasing its scope and efficiency.

The year 1933-4 is the last year of the decade since railway finances were separated

from the general finances of the State. Of the ten years, the first six were prosperous, and the next four the reverse. But the net results of the decade taken as a whole is a surplus of 20 crores and an accumulated balance in the Depreciation Fund of 32 crores.

VII. THE ACTUAL CONTRIBUTION.

It is a moot point whether the railways of a country are to be run in the national interests regardless of the cost of the service rendered and the return on the outlay, or whether a fair return should be guaranteed or worked up to by maintaining a suitable level of rates and fares. The trend of recent opinion has been in favour of the regulation of charges in such a way as to yield, in the aggregate, either a 'fair return' on the capital invested or a 'standard revenue' based on the conception of such a fair return. Where the railways are State-owned and the fair return or standard revenue yields a 'profit' or 'gain,' should such profit or gain be earmarked for railway development, or go to reduce the rate of fair return or amount of standard revenue, or should it be appropriated by the State and go to decrease the scale of taxation ? The convention entered into in 1924 was in the nature of a compromise which divided up the net gain, and allowed of a moiety being utilised in the reduction of taxation and another in building up railway reserves.

We might now see how the convention has worked in practice—The contributions made to General Revenues during these years have been as follows:

		Crores, Rs.
1924-25	...	... 6.78
1925-26	...	... 5.49
1926-27	...	... 6.01
1927-28	...	... 6.28
1928-29	...	... 5.23
1929-30	...	... 6.12
1930-31	...	... 5.74
1931-32	...	... 5.36*
1932-33	...	5.23*
1933-34 (Revised)		5.21*

[*These were the contributions due, but held in abeyance owing to railway net earnings being insufficient.]

VIII. THE RESERVE FUND.

During the seven years 1924-31, the railways have contributed to General Revenues the magnificent sum of 41.65 crores of rupees or an average of nearly 6 crores of rupees per annum. They had accumulated on 31-3-31 in a Reserve Fund a sum of 5.81 crores after paying from it 13 crores of rupees in the two lean years 1929-30 and 1930-31. Of this, about half a crore has been invested in certain securities, and the balance has been wiped out in meeting the deficit of 1931-32, as shown below:

			Crores, Rs.
1924-25	...	...	6.38
1925-26	...	...	3.79
1926-27	...	...	1.49
1927-28	...	...	4.57
1928-29	...	...	2.58
1929-30	...	...	−2.08
1930-31	...	...	−10.92
1931-32	...	...	−4.95

IX. THE DEPRECIATION FUND.

The balance in the Depreciation Fund of about 32 crores of rupees has been got together as shown below. Out of this balance temporary loans have been made to railways of 22.41 crores in the three years ending 31st March, 1934.

		Crores, Rs. Credit to Fund.	Crores, Rs. Debit to Fund.
1924-25	...	10.35	7.39
1925-26	...	10.67	7.98
1926-27	...	10.89	8.05
1927-28	...	11.38	10.95
1928-29	...	12.00	9.60
1929-30	...	12.59	11.76
1930-31	...	13.07	11.40
1931-32*	...	13.46	8.26
1932-33*	...	13.77	6.35
1933-34* (Revised)		13.50	8.00
Total	...	121.68	89.74

[*The loans from the Fund during these three years were 4.25, 10.23, and 7.93 crores of rupees respectively.]

Taking the balances of the Reserve and Depreciation Funds together the Railways had on the 31st March, 1931 a reserve to their credit of nearly 20 crores of rupees, after paying a contribution of nearly 42 crores of rupees to general revenues during the seven years following the convention—an achievement of no mean order. The balance on the 31st March, 1932 had been reduced to 13 crores.

At the end of 1933-34, the liabilities of railways to be met in subsequent years amounted to 38 crores of which 22 crores are to be repaid to the Depreciation Fund and 16 crores are due, as a first charge, to be paid to General Revenue.

X. HOW THE CONTRIBUTION WAS MADE.

A study of the manner in which State railways managed their affairs during these eight years and after contributing nearly 47 crores of rupees to General Revenues had still in hand balances aggregating 13 crores will no doubt be very interesting. In the figures given below, the actual receipts and expenses for the eight years have been shown ; the accounts are on the basis of actual realisations and expenditure, in cash.

(Amount in Crores of Rupees)

* (approximately)

	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33*	1933-34*
i. (a) Gross Revenue Receipts ...	99'04	104'24	104'34	102'70	95'10	86'63	84'43	86'78
(b) Surplus profits from subsidised Companies.	0'40	0'35	0'39	0'59	0'20	0'15	...	...
(c) Interest on Depreciation and Reserve Funds	0'64	0'81	1'06	1'28	1'32	0'93	...	...
(d) Other Misc. Railway receipts ...	0'05	0'08	0'12	0'21	0'21	0'12	...	...
Total Receipts ...	100'12	105'49	105'90	104'78	96'83	87'83	84'43	86'78
ii. (a) Working Expenses excluding Depreciation	53'51	53'87	54'83	55'59	56'05	49'22	47'89	48'40
(b) Depreciation	10'89	11'38	12'00	12'59	11'40	13'55	13'77	13'59
(c) Surplus profits paid to Cos. ...	1'66	1'57	1'59	1'52	1'16	'64	...	...
(d) Land and Subsidy to Cos. ...	0'05	0'05	0'02	0'04	0'06	0 09	...	...
(e) Interest	25'87	27'27	29'33	30'46	32'72	33'07	32'91	32'58
(f) Miscellaneous Ry. Expenses ...	0'66	0'50	0'32	0'54	0'63	0'46	0'09	0'14
Total	92'63	94'64	98'09	100'74	102'02	97'03	94'66	94'71
iii. Net— Gain	7'50	10'85	7'81	4'04	...	...	...	...
Loss	...	...	...	...	5'19	9'20	10'23	7'93
iv. (a) Contribution from Railway to General Revenues	6'01	6'28	5'23	6'12	5'74	Nil	Nil	Nil
(b) Amount transferred to Rly. Reserve Fund	1'49	4'57	2'58	...	...	...	...	...
(c) Amount transferred from Ry. Reserve Fund				2'08	10'92	4'95		

*For purposes of comparison with previous year, the change in accounting procedure introduced in 1932-33, by which credits for materials received from works not charged to revenue are shown as gross receipts instead of as a reduction of working expenses, has been neglected.

The magnitude of the receipts from Indian railways depends to a very large extent on a good monsoon. All the best laid plans of railway administrators' gang 'gang aft aglee' when the rains do not make their friendly visitations in time and bumper crops are not moved about the country. Subject to this limitation, the effect on railway receipts of political contentment and general economic prosperity is no doubt marked. A good balance of trade in favour of India is something of a guarantee of a good balance in railway coffers.

Considered from this point of view, the variations in gross receipts during these eight years cannot be considered to be extraordinary, being 5 to 6 crores from the average mean despite the effect of changes in accounting which have resulted in items of receipts being recorded as minus expenditure and *vice versa*. To increase the gross receipts, by other than purely book-keeping methods, is never an easy proposition ; when trade is at a standstill and poverty and unemployment stalk the land, it might be the last straw on the camel's back to increase the scale of rates and fares. Perhaps, the contrary move is indicated, as nothing is so welcome from the psychological point of view as the cheerful rendering of essential services regardless of cost, at times of trouble and difficulty.

XI. LEVELS OF RATES AND FARES.

A comparison was made some time ago of the levels of rates on Indian railways for different classes of commodities with those prevailing on English railways by a student of railway economics. The figures he has published, which are extracted below are of interest in that they go to show that the scale of rates in India is intrinsically higher

than that in England. Considering the difference in the capacity to pay of the two countries, there does not appear to be much room for an increase in the tariff rates.

All the figures in the tables below are in terms of pies per maund per mile.

New English Classification

Class	First 20 miles or any part of such distance	Next 80 miles or any part of such distance	Next 50 miles or any part of such distance	Remainder distance
1	.74	.37	.21	.20
2	.84	.41	.27	.25
3	.88	.43	.31	.27
4	.90	.47	.35	.30
5	1.01	.49	.37	.30
6	1.03	.53	.41	.31
7	1.13	.62	.47	.37
8	1.19	.68	.53	.39
9	1.25	.74	.59	.41
10	1.37	.90	.68	.43
11	1.47	.99	.82	.57
12	1.52	1.05	.88	.62
13	1.66	1.13	.98	.68
14	1.77	1.25	1.03	.82
15	1.87	1.35	1.15	.90
16	1.97	1.44	2.25	1.03
17	2.14	1.62	1.31	1.13
18	2.28	1.76	1.44	1.25
19	2.65	2.07	1.72	1.50
20	3.12	2.44	2.24	1.72
21	4.68	3.65	3.37	2.53

Present Indian Classification.

Class	Class rate (Maximum)
1	.38
2	.42
3	.58
4	.62
5	.77
6	.83
7	.96
8	1.04
9	1.25
10	1.87

The average miles a ton of goods is carried on any one of the railways in India is about 200 miles, and if we take it roughly that on the average, the bulk of the traffic passes over more than one railway, we might put down the average haul as 300 miles. Now, the rate per maund per mile in England for goods falling in the 10th class for a distance of 300 miles is 0.58 of a pie which is less than the class rates in India for goods falling in the 4th class and above and equal to that for goods falling in the 3rd class. It would appear that the 4th class of the Indian classification corresponds roughly to the 10th class of the English classification.

Turning from rates for goods to fares for passengers, it is known that the lowest rates for passenger traffic are to be found in India. This does not appear to have harmed the railways in any way; and Sir William Acworth, a shrewd observer of railway matters, is credited with the remark that Indian railways are probably the only railways in the world which are making a small profit on the carriage of passengers.

XII. REDUCTION OF RATES AND FARES.

There seems to be a general consensus of opinion that there is little room for an increase in the scale of rates and fares. The indications are that, to battle successfully with road competition, there should be a general reduction in short distance rates both for passenger and goods traffic with a simultaneous abolition of differences in class, both for passengers and goods, as in the case of motor bus and railway luggage rates. Other possible improvements are the abolition or reduction of terminals, and short distance charges now being levied on short distance traffic, the introduction of a general scheme of mileage gradation on the continuous mileage on all railways intended to increase the average length of haul, and the extension of the "free" time for wharfage and demurrage on the advance payment of a reduced scale of charges.

A special committee of the Indian Railway Conference Association was appointed in April 1934 in connection with a proposal to revise the general classification of goods in India. It consisted of four Traffic Officers, with expert knowledge of rates matters and they were asked to report what statistics would have to be compiled, and in which way, in order to furnish the data that will be required in solving the problems which changes of the general classification on the lines suggested in the previous para would present. The Committee were specially asked to keep in mind the fact that the special statistics, they would recommend the compilation of, should enable the financial effects of any changes in classification or rating policy to be estimated. The Committee are reported to have submitted their report, but this has not yet been published.

XIII. THE FIELD FOR ECONOMIES.

Turning to the consideration of the working expenses, it will be noticed that while the receipts have not shown an increase commensurate with the growth in the capital outlay, the working expenses have done so and have risen to the figure of about Rs. 102 crores in 1930-31. It is true that there is room for economies on all sides ; but these economies cannot alter the 'fixed charges' for interest and depreciation, unless some book-keeping devices are resorted to, for purely administrative or political reasons. The following figures bring out the fact that the scope for economy and retrenchment is restricted to about a half of the total expenditure.

(Amount in crores of Rs.)

	1924	1925	1926	1927	1928	1929.	1930.	1931.	1932.	1933-34
1. Capital : State worked Lines ...	289	400	416	435	470	491	498	502	500	...
2. Capital : Company worked Lines ...	364	272	282	295	266	276	282	285	286	...
3. Capital : All State Railways (including miscellaneous items) ...	655	675	701	733	739	770	783	790	790	780
4. Gross Revenue receipts	101	100	99	104	104	103	95	87	84	87
5. Depreciation	10·35	10·67	10·89	11·58	12·00	12·59	13·07	13·55	13·77	13·59
6. Surplus profits	1·42	1·77	1·66	1·57	1·59	1·52	1·16	0·64	...	...
7. Interest charges	23·95	24·82	27·52	28·76	29·34	30·47	32·72	33·07	32·91	32·58
8. Total Fixed charges	35·72	37·26	40·07	41·71	42·93	44·58	46·95	47·26	46·68	46·17
9. Proportion of Interest charges to receipts	24%	25%	28%	28%	28%	30%	31%	38%	39%	37%
10. Proportion of fixed charges to gross receipts	35%	37%	40%	40%	41%	43%	49%	54%	56%	54%
11. Total Working Expenses ...	88·40	91·31	92·62	94·64	98·69	100·74	102·02	97·03	94·66	94·71
12. Proportion of fixed charges to working expenses	40%	40%	43%	44%	44%	44%	46%	50%	49%	49%

The percentage of the fixed charges on the total gross receipts has increased steadily from year to year from 35 per cent. in 1924-25 to 56 per cent. in 1932-33. Even if the gross receipts of 1930-31 had reached the top figure of 104 crores, the percentage would have been about 45 per cent., the highest percentage on record. If the ratio of these charges to the gross receipts have to revert to the 35 per cent. in 1924-25 the yearly gross receipts should be increased to the enormous figure of 134 crores, a remote possibility. If the ratio is to be maintained at the mean figure of 40 per cent., it would still be necessary to earn a sum of Rs. 117 crores as gross receipts, a figure that has never been reached before.

It might be supposed that the provision that is being made for depreciation each year is more generous than is warranted by the actual deterioration or obsolescence of the assets, and that a safer index to the trend of things will be the ratio of the interest charges to the gross receipts which has increased from about 24 per cent. in 1924-25 to about 39 per cent. in 1932-33. To get back to the 1924-25 ratio, it would be necessary to earn about 136 crores as gross receipts, while to achieve the ratio of the steady years 1926-29 the receipts will have to be about 117 crores, the figures that was arrived at, taking the depreciation also into consideration.

The proportion which the 'fixed charges' bear to the total charges has varied in these years from 40 per cent. to 49 per cent., and as retrenchment can affect only the varying charges, the percentage is likely to increase in the next few years.

XIV. JOB ANALYSIS.

The services of an efficiency expert of the London Midland and Scottish Railway were requisitioned twice during the year to report on the methods to be adopted in India to increase the efficiency of railway operation and to bring about economies therein. The methods he has recommended resolve themselves into an intensive examination of all avenues of operation which goes by the caption of "Job-analysis:" An organisation has been set upon each railway of a more or less semi-permanent nature to carry on this work. The results of Job-analysis have been officially stated to be as shown below;

Railway.	Cost of 'Job analysis' organisation. Rs.	Savings effected. Rs.
E. I. Rly.	77,691	7,01,083
G. I. P. Rly.	56,680	4,15,000
N. W. Rly.	32,000	12,66,749
E. B. Rly.	63,000	2,14,864
B., B. & C. I. Rly.	58,789*	3,52,862*
Total	2,88,160	29,50,558

*Only estimated annual figure.

The reduction in working expenses of 1933-34 as compared with those of the previous year is about a third of a crore and most of it is apparently due to nothing other than the economies from 'Job-analysis.'

XV. THE PROVISION FOR DEPRECIATION.

Previous to 1924, Indian railways did not set apart any sum annually to provide for the depreciation of assets that had not been corrected by the expenditure incurred in the year on renewals and replacements. During the War, the expenditure on renewals and replacements was greatly restricted and railway property had deteriorated very considerably in value. The postponement of the expenditure on renewals and replacements led to the companies working State railways earning large surplus profits in accordance with the provisions of their respective contracts, but their extra earnings were at the cost of the State and of the tax-payer. In the post-War years, larger funds had to be provided annually for expenditure on renewals and replacements to overtake and correct the deterioration of assets during the War.

For these reasons, a Depreciation Fund was started, as provided for in the Convention of September, 1924. The original intention was, no doubt to make it applicable to Company-managed railways also, so that the surplus profits of the Companies might not be enormously increased by purely adventitious circumstances. The Companies would not accept the arrangement, and there was no alternative but to keep such an account for the Company railways *outside* their accounts and set apart an annual sum from the net earnings accruing to Government after the companies had been given their surplus profits in accordance with the old practice. This has been done, and a Depreciation Fund account is being maintained by Government for Company-managed railways, outside the regular accounts.

XVI. DIFFERENT RULES FOR COMPANY LINES.

Before the Depreciation Fund was instituted, the rules of allocation of expenditure between Capital and Revenue had been very strict. Nothing was chargeable to capital unless there was, not only an increase in the cost, but also a definite and substantial improvement in service. The variations in price levels of different times were not allowed to lead to over-capitalisation, and the original costs were converted into the probable costs of replacement (at the time of replacement) to determine whether the cost of the new asset provided in replacement was more or less than those of the old. Renewals of permanent-way carried a charge to capital only on the basis of the extra *weights* of rails and sleepers put in ; reconstruction of bridges was similarly allocated only on the basis of the increase in the weight of girders; and no charge lay to capital when rolling stock was renewed unless there was an increase in the tractive effort of locomotives, the floor area of carriages, and the carrying capacity of wagons.

These well-tried rules of conservative finance were altered for State-managed railways with the creation of the Depreciation Fund, and charges were admitted to capital on the simple basis of cost. The immediate effect of the new rules of allocation was to lead to the over-capitalisation of railways, and the understatement of the charge to revenue. As the works *under construction* in 1924 were also allocated on this basis the effect of these rules was to some extent retrospective. The Fund was started with a 'nil' balance, and the annual provision for depreciation was made on the straight line method of accounting for this, on the basis of the lines of certain of the more important assets. The immediate benefit of this arrangement was that it admitted of expenditure being incurred freely from capital funds without the connected charges, (allocatable to revenue under the old arrangements and now met from the Depreciation Fund) affecting the working expenses of the year. This had always been in the nature of a stranglehold on the spending capacity of railways, under the old systems, and it had become a rather common occurrence for capital funds to be provided only to be returned largely unspent.

One effect of the distinction in the rules of allocation between Company and State-managed railways is that the expenditure incurred on these railways on the replacement of assets is no longer comparable. To replace the same assets, the expenditure in-

curred from revenue by a Company-managed railway would be more than that incurred by a State-managed railway from the Depreciation Fund. Till recently, there was another complication due to the Company-worked railways crediting the present cost of materials removed from the line in reduction of their expenditure on renewals and replacements while the State-worked railways credited these adventitious receipts to the working expenses of the year.

The following figures indicate the annual provision for depreciation charged to working expenses and the annual expenditure incurred from the Depreciation Fund ; the figures in the Government accounts worked out for Company-managed railways have been shown separately. The balances left over in the Fund each year are given also.

DEPRECIATION FUND :
In Crores of Rupees.

		Cr. to Fund	Dr. to Fund	Balance	Cr. to Fund	D	B
1924-25	...	4.86	3.60	1.26	5.49	3.79	1·70
1925-26	...	6.38	4.38	2.00	4.29	3.61	0.68
1926-27	...	6.39	5.14	1.25	[illegible]	2.91	1.59
1927-28	...	6.73	6.42	0.31	[illegible]	4.53	0.12
1928-29	..	7.11	5.52	1.59	4.88	4.08	0.80
1929-30	...	7.97	6.08	1.89	4.62	5.68	-1.06
1930-31	...	8.30	6.32	1.98	4.76	5.08	-0.32
1931-32	...	8.55	5.03	3.52	4.92	3.24	1.68
Total				14.80			5.19

ALL STATE RAILWAYS.

		Cr. to Fund	Dr. to Fund	Net accrition
1932-33	...	13.77	6.35	7.42
1933-34	(approx)	13.57	7.23	6.34

The figures in the above table are interesting from another point of view. While the annual balances on the State Railways have *increased* steadily from 1.25 crores in 1926 to 1.98 crores in 1930-31, they have decreased steadily on the Company-managed railways. This is due mostly to the fact, that on the latter, the rules of allocation force a larger debit to depreciation. Had the State-run railways followed the same rules of allocation as the Company-worked lines, the balances in the Depreciation Fund would necessarily have been very much smaller. That is to say, the present balances in the Fund are artificial and due, in a large measure, to the 'over capitalisation' resulting from the cost basis of allocation ; a temporary relief in the annual expenditure has been obtained, but through an increase in the recurring charges for interest which have grown from 23.90 crores in 1924-25 to 32.72 crores in 1930-31, *i.e.*, by nearly 8.82 crores of rupees.

XVII. RAILWAY DEPRECIATION FUND AND OVER-CAPITALISATION.

The view has been held that, while it is essential for a commercial undertaking to run a depreciation fund, it is not so very important for a public utility service of a permanent nature, so long as a stringent programme of renewals and replacements is consistently followed and the rules of allocation of expenditure to capital are on the conservative basis of improvement. There is something to be said in favour of this view, according to which the accounts of most of the English railways are still being kept.

The principal argument against a Fund is that expenditure from the Fund is not automatically controlled by a cast-iron link to the year's resources, and that there is room for a certain amount of extravagance. If there are no funds in the Capital budget or the Revenue budget, expenditure can still be incurred from the Fund or allocated thereto. The cost basis of allocation requires the original cost of the replaced asset to be known ; and as this is not readily available in most cases, it is merely estimated. The charge to capital depends unfortunately on the accuracy of these estimates, while under the old system, the charge was a small percentage of the new cost in most of the more important types of renewals. The room for consequent mis-classification of expenditure is rather great under the new system of allocation.

The theory is advanced that it would be a step in the right direction to revert to the old principles of allocation of charges between capital and revenue on the improvement basis, and simultaneously abandon the Fund, the accounting for the transactions of which has enormously increased accounting and clerical work in all directions. The experience of the past 8 or 9 years has been valuable in indicating that the average annual depreciation of the wasting assets is in the neighbourhood of 12 crores of rupees and this figure could be used as an index by which the scale of renewals and replacements of each year can be judged and controlled. If for extraordinary reasons the actual expenditure on replacements and renewals were very much less than this figure, a suitable lump sum could be set apart from the revenues of the year for utilisation in later years, without the complicated accounting for a Depreciation Fund.

XVIII. DEPRECIATION FUND BALANCES.

There are certain circumstances which indicate that the high balances of the fund do not necessarily imply that the contributions are on an extravagant basis.

(*i*) No provision was made at the inception of the fund for arrears of depreciation which were estimated at nearly 20 crores by a committee that examined the question in 1922. The amount in the fund is necessarily very much less than the value of the expired life of the existing assets.

(*ii*) The balances do not form a very high percentage of the capital at charge though they form an increasingly heavier percentage. The figures are as follows:—

(Crores of rupees.)

Year		Capital at Charge	Depreciation Fund, balance	Percentage
1927-28	...	7,14	9.01	1.3%
1928-29	...	7,39	11.41	1.5%
1929-30	...	7,70	12.24	1.6%
1930-31	...	7,83	13.92	1.8%
1931-32	...	7,90	19.12	2.4%
1932-33	...	7,90	26.54	3.4%
1933-34	(Approximate)	7,90	32.88	4.2%

The accretions to the fund during the last three years are abnormally high owing to comparatively low expenditure as a result of financial stringency. The average annual increase during the first seven years is 2 crores ; during the next three it is over 6 crores. On the assumption that the fund would normally have grown at the rate of 2 crores a year—the average of the first seven more or less normal years—the balances at the end of 1933-34 can be taken as about 20 crores and equal to 2½ per cent. of the capital at charge. This cannot be considered a high figure seeing that the Depreciation Fund balances of the 4 British Railways are in the neighbourhood of 4 per cent. of their capital.

(*iii*) The contribution to the fund is proportionate to the assets in existence at present, whereas the withdrawals are proportionate to the assets in existence years ago which are falling due for replacement or renewal now. It follows that in a rapidly expanding concern like Indian railways the contributions must be inevitably much in excess of the withdrawals, and a difference of 2 crores between the annual contributions to the fund and the annual withdrawals, which was the average in normal times, can hardly be considered too high.

(*iv*) The capital at charge has increased from 1923-24 to 1931-32 by 170 crores, and the appropriation to the Depreciation Fund has correspondingly increased by 3.42 crores from 1924-25 to 1932-33. No withdrawals from the fund would be necessary on account of these newly created assets for a long time to come.

(*v*) Indian railways are still comparatively young ; many of our assets have still a long useful life and their turn to be renewed or replaced is still far distant. Out of the total estimated contribution of 13½ crores on account of all State Railways excluding worked lines in 1933-34 about 30 lakhs are in respect of assets with an average life of 200 years, about 43 lakhs in respect of assets with an estimated life of 125 years, and 171 lakhs in respect of assets with a life of 60 years.

(*vi*) In most of the years since the separation, Railways have been replacing assets bought when prices were comparatively low and paying contribution on assets bought at higher prices. The withdrawals from the fund have therefore been exceptionally low, while the appropriations to it have been particularly high. In later years the position might be different.

(*vii*) The rules provide that it is only when whole units are replaced that a charge representing the original cost, should be made to the Fund. When partial renewals are effected, no charge is made to the Fund. The cost is debited to Revenue—repairs and maintenance. As Sir Arthur Dickinson pointed out, an asset may be renewed partially many times during its life.

On the other hand there are certain factors which have operated in the opposite direction and tended to retard the growth of the fund:—

(*i*) Railways had a comparatively ambitious programme of works (including renewals) in the years immediately following the institution of the fund. In more recent years, though the programme of renewals has suffered considerable reduction, scrapping of assets—particularly rolling stock—without replacement has resulted in large withdrawals from the Fund.

(*ii*) Premature renewals (specially of permanent-way, in order to find second-hand rails for new constructions and to strengthen the main line track to carry heavier engines to deal with increased traffic) have been effected to a large extent ; and, under a mistaken interpretation of the rules, the original cost of the asset renewed was in all such cases debited to the fund even when the asset had not been disposed of, but

merely transferred elsewhere ; for instance, when a length of permanent-way was removed from its original position and re-laid elsewhere on the line.

It may be added that apart from the high balances of the fund there is no evidence at present to justify the conclusion that the present estimated lives are too low. The experience since the starting of the fund has been too short and on the whole too abnormal to justify any conclusions on the question but it must be remembered that these lives were adopted after investigation by an expert committee consisting of an Engineer, a Locomotive Officer and an Accounts Officer and were based on the past experience of Railways. Secondly a comparison of the lives adopted on Indian railways with those adopted for similar assets by the London and North Eastern Railway does not suggest that the former have been under-estimated. Finally there is Sir Arthur Dickinson's recommendation that in no case should be greater life than 50 years be fixed for any railway asset, and that in the case of electrical apparatus, the maximum should be 25 years. His reason for making this recommendation was that in fixing normal lives sufficient account had perhaps not been taken of obsolescence.

XIX. INTEREST CHARGES.

The steady growth of the interest charges, as an important factor in the diminution of the net return from Indian railways has been commented upon elsewhere. Of the 32.72 crores of interest charges met in 1930-31, 20.74 crores were in respect of State-worked lines and 11.95 crores in respect of Company-worked lines, roughly a third of the total. The total interest charges on English debt of various kinds, such as Sterling debt, Company's share capital, debentures and debenture stock aggregated about 5½ million pounds sterling, which converted at the average rate of exchange, is equal to about 7.40 crores of rupees or roughly a fourth of the total interest charges. Of the rest of the 25.32 crores, the lion's share is interest on capital outlay provided by Government.

The method of calculating interest on railway capital outlay is somewhat peculiar. It is calculated at the fixed rate of 3.3252 per cent. on the total oulaty as on the 31st March, 1917, and at an *average rate of interest* on all capital outlay after that date. This average rate of interest has varied slightly in recent years owing to the higher interest charges on recent borrowings. The figures for the last few years are as follows:—

		per cent.
1919-20	... ...	5.9328
1920-21	... ...	5.1979
1921-22	... ...	6.1038
1922-23	... ...	5.48
1923-24	... ...	5.69
1924-25	... ...	5.54
1925-26	... ...	5.66
1926-27	... ...	5.43
1927-28	... ...	5.38
1928-29	... ...	5.63
1929-30	... ...	5.31

It had been the practice hitherto to obtain the average rate of interest applicable in any year by dividing the total interest charges for all railways, actually payable on all loans floated by the Government of India after 1916-17 by the *nominal* amount of the debt outstanding. This method did not allow for loans floated at a premium or discount. Most of these loans having been floated at a *discount,* the actual rate of interest applied has been naturally less than the actual cost of borrowing. It was wisely decided to apply the correct rate obtained by dividing the total interest charges, *not* by the nominal amount of the outstanding debt but by the actual amount realised for the nominal amounts. This has resulted in an increase of approximately one-third of one per cent. in the rate and about a crore in the interest charges borne by railway revenues.

It might not be out of place to observe here that, on the separation of Railway from General Finances in 1924-25, the Railway capital account was permanently debited with the balance on 31st March, 1924 of the capital liability involved in the purchase of railways under redemption by Annuities and Sinking Funds. As a consequence of this arrangement, the Railway Revenue Account is charged with the full interest in respect of the liability outstanding on 31st March, 1924 (included under the head Interest on Sterling Debt) and the balance required to make up the total annuity payment and the Sinking Fund charges is borne by General Revenues, thus giving a legitimate relief to the railway budget. As an exception to this arrangement, the charges for the Discount Sinking Fund for the old Oudh and Rohilkhand Railway, created for the redemption of debt incurred in excess of money raised for the purchase of the Railway, are still debitable to the Railway Revenue Account.

These Sinking Funds were established in connection with the Eastern Bengal, North Western and East Indian Railways to re-

deem India $3\frac{1}{2}$ and 3 per cent. Stock issued in lieu of Annuity or Debenture Stock. They have been applied to the purchase of Indian stock of the denomination offering the best yield.

One of the most vigorous criticisms made by the Acworth Committee was that the economic development of India had suffered enormously owing to the utter failure of Government to lay out sufficient borrowed money in railways at a time when the rates of interest were comparatively low. Lord Inchcape said that it would have paid Government in the earlier years to borrow funds at 1 or $1\frac{1}{2}$ per cent. higher than the market rate at that time. He stated in giving evidence before the Acworth Committee, "If I had a railway and wanted the money, and saw the trade there, I should raise the money, even if I had to pay $7\frac{1}{2}$ or 8 per cent."—an opinion which should, no doubt, have been remembered at the time of deciding upon the postponement of the acquisition of the Bengal and North Western and Rohilkhand and Kumaon Railways.

The Acworth Committee said:

"Had the Government thought fit to borrow money even at a rate considerably higher than the rate of net return that the railways could earn on it, we believe its action would have been abundantly justified. But in fact the Indian Government never needed for many years previous to 1914 to face this position. A reference to the curve of net revenue given in the Administration Report on Railways in India will show that, though in the earlier years the interest on railway capital had to be met partly out of taxation, for the last 45 years the net earnings of the capital invested in Indian Railways has never sunk below 4 per cent. For the last 20 years it has only three times sunk below 5 per cent., and this result was attained though a substantial sum had been charged against revenue for repayment of capital and in spite of the fact that a not inconsiderable part of the total mileage had been built not on commercial grounds but for strategic purposes. Now the average rate payable by the Government of India on this borrowed money is about $3\frac{3}{4}$ per cent. We are unable with these figures before us to find any justification for the policy which has been persistently pursued of starving the development of Indian Railways."

It is likely that the Acworth Committee had in mind the construction of lines in suitable areas and the building of stock to keep abreast of the traffic that was actually offering, and not the provision of increased facilities or luxuries, such as a faster service, or better appointed carriages, or more expensive wagons or station buildings of architectural beauty. A good portion of the capital spent on railways during the last 14 or 15 years has apparently been invested in the latter directions and so failed to yield a commensurate return.

XX. STATE *VERSUS* COMPANY-MANAGEMENT.

The capital at charge on the 31st March, 1931, of State-owned railways was 783.32 crores of rupees. Of this 497.91 crores appertain to lines worked by the State and 281.97 crores to lines worked by Companies, the balance being made up of miscellaneous items. While the return on the capital of State-worked railways was 2.85 per cent and resulted in a loss of over 6.5 crores of rupees after meeting interest and other charges, the Company-managed railways showed a return of 4.76 per cent. and registered a small gain of 31.64 lakhs of rupees. The corresponding figures of rate of return and net financial result for the last few years are shown below and are full of interest.

	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33
Percentage of Net Revenue Receipt										
1. On Capital at charge: State Rys. ...	3·64%	5·33%	4·54%	4·49%	4·81%	4·59%	3·81%	2·85%	2·64%	2·57%
2. On Capital at charge: Company Rys. ...	5·92%	6·29%	6·29%	5·70%	6·07%	5·98%	5·07%	4·76%	3·74%	3·46%
					In Lakhs of Rupees					
Net gain or loss to Govt.: State Rys.	−37	459	367	363	497	260	−80	−653	−765	−776
Net gain or loss to Govt.: Coy. Rys.	690	842	516	373	508	383	325	32	−215	−287
Total gain or loss (including Misc.)	641	1,287	869	721	1,015	659	254	−624	−980	−1,063

The figures in the above table show how very consistently the Company-managed State railways have yielded a better return than the State-managed railways. This is somewhat remarkable considering that, while the State railways meet from Capital all the extra cost of replacing an asset, the Company railways meet such expenditure from Revenue. The State-worked lines include the strategic lines of the Frontier, but even after making an allowance for the loss on these lines, the Company lines show a better result. The record of 1924-25 of a net gain of over 13 crores is accounted for partially by the State railways changing their rules of allocation in that year and charging very large amounts to Capital, that would have otherwise been charged to revenue in the same way as on the Company lines. This record can never be reached again, as the adventitious paper credits to working expenses will not recur.

XXI. ARE COMPANY LINES MORE ECONOMICALLY RUN ?

The following figures for individual State and Company railways would appear to go far in justifying the impression that Company railways are generally more economically run.

STATE RAILWAYS	Percentage of net earnings on total capital at charge								
State-Managed	1924-25	1925-26	1926 27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33
Eastern Bengal	4.25	3.89	5.25	5.28	4.98	4.19	2.29	1.62	1.56
East Indian	6.99	6.07	5.65	6.13	5.79	5.08	4.22	4.12	4.18
Great Indian	7.73	6.18	5.57	5.49	4.66	4.09	2.63	2.41	2.57
North Western (Commercial)	7.42	3.86	3.99	4.78	4.79	3.78	3.23	2.95	2.77
Burma							3.09	2.48	2.13
Company-Managed									
Assam-Bengal	3.02	3.94	4.11	4.67	4.49	3.18	3.05	2.69	1.89
Bombay-Baroda	8.03	7.09	6.12	6.16	7.21	6.36	5.19	5.63	5.99
M. & S. M.	6.86	8.57	6.67	6.37	8.22	7.23	6.00	6.19	5.58
South Indian .. .	8.72	7.98	8.13	6.79	6.87	6.68	5.43	5.11	5.11
Private-owned									
Bengal & N. Western .	9.35	10.25	11.12	11.43	10.35	9.82	7.96	7.82	8.39
Rohilkand & Kumaon .	7.95	9.85	7.88	8.51	8.03	7.24	7.09	6.67	7.58
Nizam's State (B. Gauge) .	9.71	9.60	9.11	1.37	9.46	9.87	8.00	6.72	6.04
,, ,, (M. Guage) .	9.39	7.89	8.94	9.31	9.41	7.88			

Individual figures in the above table for each railway are not strictly comparable, as the State-managed lines generally set aside more for depreciation than the expenditure incurred on replacements and renewals ; but the general tendency for economical management shown by Company-managed railways is unmistakable. The results of operation of State-managed railways have tapered off much more quickly during these years than those of Company-managed railways, whether owned by the State or not.

XXII. THE RETURN ON CAPITAL.

The rates of return on the capital at charge of all State-owned railways taken together for several years are given below. The signs of deterioration are rather pronounced.

1913-14 ...	... 5.01	per cent.
1921-22 ...	... 2.64	,,
1922-23 ...	... 4.38	,,
1923-24 ...	... 5.24	,,
1924-25 ...	... 5.85	,,
1925-26 ...	... 5.31	,,
1926-27 ...	... 5.05	,,
1927-28 ...	... 5.41	,,
1928-29 ...	... 5.22	,,
1929-30 ...	... 4.65	,,
1930-31 ...	... 3.70	,,
1931-32 ...	... 3.16	,,
1932-33 ...	... 2.88	,,
1933-34 (approx.)	... 3.10	,,

Thanks to the funds for railway construction having been borrowed in the earlier years at rates of interest varying from 3 to 4 per cent., a return of only 4.32 per cent.

on the 783 crores of capital at charge on 30-3-31 would have been sufficient to stave off a loss. Taking State-managed railways separately we find that a return of 4.16 per cent. would have been sufficient to balance the accounts, while the corresponding figure for Company-managed railways would be somewhat higher (approximately 4.65 per cent.) due to the surplus profits and higher rates of interest on the Company's capital having to be met in the case of the latter.

The above figures of "rates of return" on capital outlay do not correspond to the rates of dividend earned by commercial concerns. The latter generally represent the yield on the *ordinary capital* of the undertaking, after the payment of interest on loans and debentures, and depend upon the proportion of such loans to the total capital and the terms thereof. The Bengal and North Western Railway has, for several years, been declaring huge dividends to its shareholders, although the actual "rates of return" have been only between 8 and 12 per cent.

The scale of railway financial operations is so large that a small difference in the percentage of return accounts for a large difference in the surplus or deficit, as evidenced by the following figures:

Year		Percentage of Net Earnings on Capital	Net gain or loss to Government (In Lakhs of Rs.
1923-24	...	5.24	6,41
1924-25	...	5.84	12,87
1925-26	...	5.23	8,69
1926-27	...	4.95	7,21
1927-28	...	5.30	10,15
1928-29	...	5.08	6,59
1929-30	...	4.49	2,54
1930-31	...	3.53	−6,24
1931-32	...	3.02	−9,86
1932-33	...	2.88	−10,80

It is possible to use a statistical figure for the comparison of the results of working of the different classes of railways which avoids the difficulty mentioned above of the difference between State and Company lines about the provision for depreciation. This is the percentage that ordinary working expenses exclusive of the expenditure on replacements and renewals bear to the gross earnings. The following are the comparative figures for several years:

PERCENTAGES

State-Managed		1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33
East Indian	...	51·34	51·15	51·29	52·70	50·06	52·02	54·12	52·03	51·97
Eastern Bengal	...	58·94	60·82	54·28	58·01	55·38	56·71	64·88	65·26	65·30
North Western	...	54·13	55·30	57·92	60·01	60·59	63·22	66·59	62·54	62·58
Great Indian	...	54·11	62·52	60·62	46·87	55·14	58·07	63·41	60·38	59·75
Company-Managed										
Assam-Bengal	...	55·07	51·40	50·20	47·12	49·48	55·20	56·81	59·78	65·70
Bombay-Baroda	...	49·65	52·34	54·53	52·32	52·07	53·22	56·73	53·16	52·49
M. & S. M.	...	46·63	47·87	49·00	45·50	43·57	43·29	49·69	40·55	48·28
South Indian	...	50·24	50·01	47·57	44·44	46·76	45·48	49·30	49·30	50·67

XXIII. PURCHASE OF LINES BY THE STATE.

The convention of September, 1924 appears to envisage a tacit undertaking by Government to transfer to State-management the railways which were operated by Companies as and when the contracts with these latter expired. Since the convention was agreed to, the East Indian, Great Indian Pęninsula and Burma Railways have come under State management and certain privately-owned lines such as the Southern Punjab Railway (7 crores) have been purchased. But the policy of Government's assuming the management of these railways have received a check in recent years and the contracts with the Companies managing the Bengal and North Western, the Rohilkand and Kumaon and the Assam Bengal Railways have had to be renewed for different periods. The two former are privately-owned railways which have for several years, been yielding a return on the outlay of much over 6½ per cent., as the following table will show:

	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
B. & N. W. .	9.34	9.35	10.25	11.12	11.43	10.35	9.82	7.96	7.82
R. & K. .	8.85	7.95	9.85	7.88	8.51	8.03	7.24	7.09	6.67

Under normal circumstances it would have apparently been in the interests of the tax-payer to have arranged to acquire these lines with the help of borrowed funds on the 31st December, 1932, but due, perhaps almost entirely to the difficulty of raising loans, these contracts with the railways have been extended for another five years, the terms and conditions being altered slightly in favour of the State.

The contract with the Assam Bengal Railway which is a State-owned railway could have been terminated on the 31st December, 1931, but it was considered that it would not be financially profitable to purchase the Company's interest in the railway and the contract continues automatically for another 10 years, *i.e.*, upto the 31st December, 1941. Amongst the reasons advanced against the immediate assumption of State control of this railway were the following:

(*i*) The loss of Indian income tax on the Company's earnings.

(*ii*) The high interest charges that would be payable on the sum required to meet the purchase price.

(*iii*) The possible postponement of the beginning of important projects such as the Bombay Sind connection and the Decca Aricha Railway, were funds diverted to the transfer of the Assam Bengal Railway.

(*iv*) The probability of the assumption of the State management of the railway leading to an increase in the cost of staff and the consequent reduction of the net earnings. It will be noticed that all these reasons could be advanced with almost equal strength against the transfer to the State of any Company-managed railway.

XXIV. PURCHASE OF RAILWAY STORES.

According to the convention of 1924, Government was committed to the undertaking that the purchase of stores for the State Railways should be undertaken through the organization of the Stores Purchase Department of the Government. The significance of this undertaking lies in the belief that the latter department owes its genesis to the policy of Government to encourage Indian industries and make its purchases of stores, wherever possible, in India itself. The following figures give some indication of the scale of purchases of State Railways in one year and the vital influences this must necessarily have on the industrial and commercial life of the country.

Value of Railway materials purchased.

(In Crores of Rs.)

VALUE OF IMPORTED MATERIALS

	Total Purchase 1932-33	Purchased direct	Purchased through Agents in India	Total Imports materials	Value of Indigenous materials	To rc 1931	Total Purchase 1930-31	Total Purchase 1929-30
Rolling Stock	1.33	0.47	0.57	1.04	0.29	3.29	6.44	8.91
Tools and Stores ...	3.11	0.13	1.42	1.55	1.56	3.71	5.68	7.14
Permanent Way ..	2.07	0.03	0.12	0.15	1.92	3.68	4.05	5.56
Electric Plant	0.63	0.14	0.48	0.62	0.01	0.87	1.40	2.16
Building and Station materials and fencing ...	0.18	0.01	0.10	0.11	0.07	0.29	0.57	0.57
Bridge Work	0.13	...	0.07	0.07	0.06	0.15	0.32	0.53
Workshop Machinery ...	0.25	0.07	0.18	0.25	...	0.26	0.46	0.66
Engineer's Plant ...	0.14	0.03	0.10	0.13	0.01	0.14	0.23	0.44
Other materials * ...	3.28	...	0.30	0.30	2.98	3.57	4.60	4.10
Total ...	11.04	0.88	3.33	4.21	6.83	15.99	23.75	30.06

* Other materials consist of coal and coke, stone, bricks, lime and ballast, etc.

Value of Stores purchased by the Principal Railways (which reported)

(In Lakhs of Rupees.)

A.—Value of Stores imported direct.
B.—Value of Imported Stores purchased in India.
C.—Value of Stores of Indian Manufacture or of Indigenous Origin.

N.B.—Materials invariably purchased in India such as bricks, lime and mortar, timber ballast &c. are not included.

Classes	1915-16			1916-17			1917-18			1918-19			1919-20			1920-21			1921-22		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Bridge-work	3	1	2	3	...	1	1	...	...	...	...	...	6	...	...	33	1	2	92	3	1
Engineer's Plant excluding petty tools	4	2	...	1	2	...	...	1	...	1	2	1	1	4	1	4	8	1	13	10	1
Workshop Machinery & heavy tools ..	9	2	...	8	3	...	3	4	...	3	5	...	15	8	...	30	24	...	54	12	1
Permanent Way.																					
1. Rails	18	1	14	27	9	27	...	2	4	..	...	50	1,13	...	82	51	...	62	88	20	1,00
2. Steel and Cast-iron Sleepers and Chairs and fastenings ...	31	2	14	18	...	38	2	...	13	2	...	14	57	2	34	1,04	4	38	1,23	9	60
3. Wooden Sleepers	...	...	...	...	...	...	...	...	...	...	...	1,28	...	...	1,30	16	15	1,56	2	29	2,35
Rolling Stock.																					
1. Locomotive and spare parts ...	1,35	1	5	31	3	3	56	5	4	91	4	5	1,44	4	6	6,54	24	6	5,98	10	6
2. Coaching and Goods Stock including spare parts ...	1,43	5	21	70	11	11	37	14	32	89	32	62	6,41	44	69	5,48	35	1,05	7,05	50	1,47
3. Buildings and Station Materials and fencing	5	5	8	3	12	10	1	11	9	1	11	6	7	15	9	12	26	13	27	23	12
Tools and Stores.																					
1. Tools and Cutlery	3	3	1	3	7	1	3	11	1	5	13	1	12	11	2	13	13	2	14	14	2
2. Iron, Steel and other metals (excluding Public Way materials)	30	16	15	15	45	21	11	79	33	36	55	57	68	60	78	61	88	68	63	73	59
3. Portland Cement	5	1	...	...	3	3	...	2	3	...	...	4	...	1	3	3	5	5	5	3	4
4. All other stores	33	69	3,35	23	1,13	4,80	14	1,38	5,06	13	1,79	3,76	60	2,15	4,15	63	2,22	4,41	1,30	5,25	4,43
5. Electrical Plant and materials ...	12	7	...	8	11	1	7	11	1	7	17	2	21	28	1	31	36	2	58	35	2
Total ...	4,31	1,06	4,17	2,10	2,24	5,96	1,35	2,78	6,06	2,48	3,18	7,06	11,48	3,92	8,30	16,23	5,01	9,01	19,72	8,16	10,73
Grand Total for the year ...	9,54			10,30			10,19			12,72			23,70			30,25			38,61		

From a comparison of the figures for the purchase of Stores in recent years given above, with those for the earlier years shewn below, interesting inferences can be drawn. The hectic buying of materials immediately after the Great War must have had repercussions in many directions.

XXV. PURCHASE THROUGH THE INDIAN STORES DEPARTMENT.

The value of the annual purchases of stores in a normal year might be taken to be approximately 30 crores of rupees, of which more than half is the cost of imported materials, if the purchase of stone, bricks, lime, ballast, coal and coke included under the head "other materials" are excluded. The bulk of these purchases appears to have been made through the machinery of the Railway Stores Departments instead of through the Stores Purchase Department of the Government of India, as the following official figures will show:

(In Thousands of Rupees)

	1929-30	1930-31	1931-32
1. Textiles ...	41,17	38,24	16,92
2. Cement ...	16,53		
3. Creosote ...	...		
4. Lubricating and other oils and greases ...	57,44		
5. Paints and Varnishes ...	17,35		
6. Electric fans, lamps and other electrical stores	8,69		
7. Plant and Machinery ...	1	89,71	1,09,22
8. Water supply materials ...	2,11		
9. Structural steel work including bridge girders	48		
10. Soaps ..	53		
11. Hardware ...	2,81		
12. Miscellaneous ...	3,33		
Total	1,50,45	1,27,98	1,26,14

The above figures show in a general way that increasing use is being made of the central machinery of purchase, such purchases having increased from 104 lakhs in 1928-29 to 150½ lakhs in 1929-30 and dropped to only 126 lakhs in 1930-31. Nevertheless, the proportion of these purchases to the total average of about 30 crores is only about 5 per cent., a rather disappointing ratio to those who believe in the efficiency of centralised purchases.

To those who are interested in the study of the gradual change in the policy of railway stores purchase, the table of figures in the next page will be informative. Mark how the purchases of stores, (exclusive of brick, lime, ballast, etc.), have increased from 9½ crores in 1915-16 to 38½ crores in 1921-22, and how the value of stores purchased in India has generously increased from year to year.

XXVI. RUPEE TENDER SYSTEM.

The new stores purchase rules promulgated with the Government of India, in the Industries Department, Resolution No. S.217 of the 12th December, 1929, came into force from the 1st January and provide that all articles required to be purchased for the public service, except those of special and unusual character, must be purchased on the condition that delivery shall be made in India for payment in India. They also permit of a limited degree of price preference being accorded to articles produced or manufactured either wholly or partly in India. Departmental regulations have been issued by the Railway Board for the guidance of railway officers in the observance of these rules. The assertion of a more definite preference for stores produced or manufactured wholly or partly in India which was the feature of the rules made by the Secretary of State more than a decade ago has thus been followed up by a fairly strict rule requiring purchase in India and in Indian coin.

These rules for stores purchase apply in their entirety only to the State-worked railways. They cannot be made to apply, as a matter of course, to Company-managed State railways as they might be considered to infringe upon the powers of the Companies' Home Boards in these matters. But the Company-managed railways were asked to follow these rules as far as might be practicable. The following percentages of the English grant to the total grant for stores purchases for the last three years bring out the difference between State-managed and Company-managed railways in the matter of observance of the new policy of Government.

	1929-30	1930-31	1931-32
State-managed Railways	24%	16%	7%
Company-managed Railways	44%	31%	30%

While there has been practically no change in the percentage of purchases made by the Company-worked State railways after the "Rupee Tender System" of purchase came into force, that of the State-worked railways has been more than halved.

XXVII. STORES BALANCES.

Another interesting statistics in connection with railway stores is the percentage of the balances of stores on hand to the total issues of stores on railways.

(Amounts in Lakhs of Rupees)

Year	Receipts	Issues	Closing balance	Percentage of closing balance on issue
1925-26	40,44	42,41	14,87	35
1926-27	41,24	42,13	14,26	34
1927-28	49,55	47,03	16,79	36
1928-29	45,97	46,04	16,73	36
1929-30	41,51	41,70	16,54	40
1930-31	32,74	34,40	14,88	43
1931-32	...	...	13,65	...

Technical opinion is not in favour of laying down definitely a method by which the normal maximum balances of stores of each railway should be calculated but is of the view that the closing balances of stores should not ordinarily exceed 40 per cent. of the issues. Judged by this criterion, there has been an accretion of stores balances during the last year perhaps inevitable in view of the economic position.

XXVIII. INDIAN RAILWAY COLLIERIES.

There are ten collieries in India which are owned and worked by the State. The capital invested in them up-to-date exceeds 4 crores of rupees and is roughly distributed as follows:

	lakhs.
Land	89
Buildings	51
Plant	99
Rolling Stock	2
Sidings	26
Development	127
Cost of Prospecting etc., ...	19
Capitalised loss in working ...	1
	414
Less, Depreciation cleared off ...	52
	362

The output of the collieries has been much curtailed, but is over 2 million tons of coal of all kinds per annum. The outlay on each quarry and the output during the years 1931 32 and 1932-33 are shown below:

	Colliery.	Owner.	Fixed assets value Lakhs Rs.	Output Tons. 1931 32	1932-33
1.	Joint Bokharo and Sawang ...	E. I. & B. N. ..	48	702,315	562,825
2.	Kirharbaree and Serampore ...	E. I.	68	647,223	569,934
3.	Bhurkunda	State	54	161,452	148,135
4.	Kargali	State	43	636,129	414,135
5.	Argada	B. N.	29	234,016	194,228
6.	Talcher	B. N.	19	234,016	19,371
7.	Jarangdih	B. B. & C. I. & M. & S. M.	78	111,124	137,244
8.	Talcher	M. & S. M.	39	32,748	89,561
9.	Kurasia	B. B. & C. I.	8	...	14,204
10.	Religara	No longer worked ...	20	...	21,40

The Kirharbaree and Serampore collieries are owned entirely by the State, and no royalties are paid to private owners of underground rights. The bulk of the coal from these collieries is mined at a depth of about 1,000 feet below the surface of the earth and heavy expenditure has had to be incurred, on pits, and galleries lifting tackle, pumping and lighting machinery. A fine battery of coke-ovens and an up-to-date recovery plant work in conjunction with these collieries and the outlay in these is included in the amount of the 68 lakhs constituting the "Block account" of the collieries.

On the other hand, most of the coal in the Bokhara Sawang and Kargali collieries has been *quarried* and not mined. There has been no expensive outlay on pits and galleries, on lighting or pumping. The mining rights have been leased on a royalty basis and capital expenditure which might otherwise have been incurred has thus been avoided.

The 'cost of production' of the best steam coal from the State Railway Collieries varies with each colliery. At the pits' mouth, it is about three rupees per ton in Kargali, but less than Rs. 2-8 per ton at Bokharo, while it is as much as Rs. 4-8 per ton at Giridih, and Rs. 4 per ton at Bhurkunda. The market rates for the same quality of coal have a natural tendency to approximate to an average, irrespective of the cost of production ; but the more centrally located collieries have advantages in regard to freight that are no doubt fully taken advantage of, in fixing the selling prices. The opening up of new quarries and collieries in the Central Provinces has served to increase the competition in the Bombay markets, as the lower

quality of the coal is more than compensated for by the railway freight. The cost of coal, per ton, purchased by Indian Railways, *exclusive* of freight, varied from Rs. 8.9 per ton paid by the Assam Bengal Railway, to Rs. 3.44 per ton paid by the Bengal Nagpur Railway. The average cost of coal, per ton, purchased during 1932-33, *inclusive* of freight, varied from Rs. 18.9 per ton paid by the South Indian Railway to Rs. 5.94 per ton paid by the Bengal Nagpur Railway.

Indian railways consumed 6.3 million tons of coal per annum during 1931-32 and 1932-33, which quantity is roughly three times the output of the railway collieries. Most of the collieries, other than those in the Bokharo-Ramgarh field which yield quarry coal of excellent quality at a very low price, produce coal at a greater cost than the rate at which coal could be purchased, probably for the reason that the mines are not worked to maximum capacity.

Indian railways derive a very large revenue from the carriage of coal. The total tonnage of coal, coke, etc., despatched by rail averaged over 16 million tons per annum during the last two years and the freight earned was over 8 crores of rupees per annum. Of this, the freight on coal intended for railway consumption was only 2 crores of rupees per annum. Considerable pressure is being brought to bear on the Government of India to adopt a scheme of compulsory restriction of coal in order to help the Indian Coal industry. Any policy accepted or approved by Government for the compulsory restriction coal output will have repercussions not only on the policy regulating the development of railway (State) collieries at present, but also on the earnings and expenditure of State Railways.

VIZAGAPATAM : XXIX. A RAILWAY HARBOUR.

Situated between the 17th and 18th degree of latitude on the Coromandel Coast of India, Vizagapatam is almost midway between the 1,000 miles of unbroken sea line between Madras and Calcutta. It is well-served by two systems of railway linking it with Madras and Calcutta and it was only a year ago that a new line of railway nearly 300 miles long linking the port with Raipur in the Central Provinces of India was opened for traffic and thus brought an area in the heart of the country of about 87,500 sq. miles into direct touch with the great arteries of sea-borne commerce.

The new Port of Vizagapatam has the distinction of being the only port in India which has been created by the untiring zeal of Indian railways. All the earlier schemes proposed by eminent engineers like Mr. Thorowgood, Sir Alexander Rendle, Sir William Mathews and Sir Francis Spring contemplated an entirely artificial harbour on the sea-face on the lines of that at Madras, and it was left to the enterprise of the Bengal Nagpur Railway, which obtained sanction nearly 20 years ago for the preparation of a scheme to consist of an inside harbour at Vizagapatam.

The firm of Sir John Wolfe Barry and Partners engaged by the railway is credited with the suggestion for the alternative scheme and the first plans were prepared as early as 1922 by Col. Cartwright Reed who had the distinction of commencing the work. After his retirement in 1928 the work has been carried on to a successful conclusion by Mr. W. C. Ash Engineer-in-chief with the assistance of Captain J. W. Day who is in charge of the dredginer operation.

The Harbour is situated in a natural basis surrounded on all sides by the hills. The entrance to the sea is through a channel half a mile in length and about 300 feet broad, which has been deepened by dredging operations to allow, at present, of ships of a minimum draft of 28 feet 6 inches negotiating it in safety. There are three mooring berths one of which is reserved for management the loading being done by lighters. A third quay berth is expected to be available shortly.

The rocky bottom of the channel was attacked with the help of a special Rock Breaker and Dipper Dredger "Waltair" built by Messrs. Lobnitz and Co. of Renfrew which is equipped with a 6 ton 'needle' with a point of nickel-steel. This 'needle' lifted 6 feet and dropped on the rock pounds a hole of about 3 feet and a succession of such holes at distance of 3 feet is made. When this is done, the "dipper" comes into action and with its steam shovel, picks up the rock and deposits it in barges, to be carried away. More than a million cubic feet of rock have thus been excavated.

The siltation due to the Littoral drift has been kept in check by an artificial breakwater, that has been ingeniously constructed by scutting two ships, the Janus and the Willesden in the correct position stern to stern and by dumping around and about them large boulders. Resting on the sea-bed these ships have still a free board of about 15 feet. They have been in position for over 18 months and have functioned successfully so far. Under the protection of this novel breakwater, the suction dredger "Vizaga-

patam" has been able to maintain the channel free from sand and to clear the 'sand-trap' created at the entrance.

The quay wall is over 1,600 feet in length and consists of 39 monoliths each 40 feet by 25 feet sunk at the depth of 45 feet below low water offering considerable room for further dredging. A dry dock measuring 320 feet by 60 feet provided primarily for working on the dredger 'Vizagapatam' will accommodate some of the coastal steamers.

Just behind the quay wall are situated large transit sheds 400 feet by 200 feet with leading platforms at the back and railway sidings on either side of the front and back. Electric cranes are installed to run on rails the whole length of the quay wall. Stacking ground has been reserved for manganese ore fed by a grid of railway sidings from which narrow gauge lines communicate with the jetties and the steamer. The Great Northern Trunk Road passes through the harbour area and a steam ferry carry vehicular and pedestrian traffic across the harbour basin which cuts the road.

XXX. THE HARDINGE BRIDGE.

According to a well-informed article in the Railway Gazette, the bridge was completed in 1915 at a cost of about 3½ crores of rupees or say, £2,600,000 sterling to replace the wagon and passenger ferry services that originally linked the main lines of the Eastern Bengal Railway located to the south and north of the Ganges, and formed part of the trunk routes between Calcutta and Northern Bengal, Darjeeling and Assam.

When the bridge was completed the main channel of the river was close to the left bank, but it subsequently began to swing over towards the right bank at the point where it passes through the bridge and at the same time swung over further towards the left bank in the reach upstream of the Sara guide bank. This tendency to swing periodically from one side to the other is a normal characteristic of alluing usually confined within certain limits which vary for each river and also for different portions of the same river. The tendency of the Ganges in the vicinity of the Hardinge Bridge in recent years has been to move over towards an old channel, which it had previously occupied in 1868.

On receipt of the first news of a serious breach in the right guide bank in September 1933, the Railway Board cabled to the High Commissioner for India asking him to request Sir Robert Gales—who had been the Engineer-in-Chief in charge of the design and construction of the bridge and is now a partner in Messrs. Rendel Palmer and Tritton, Consulting Engineers to the Government of India to come out to India and advise the Board regarding damaged guide bank and strengthening the protection works generally. Sir Robert Gales arrived in India at he end of November last and as a result of his inspection of the bridge it has been decided to provide a mole for the protection of the south or right abutment by adding a curved head to the stump of the damaged guide bank, and to close the channel which had been formed at the back of the isolated head.

The items of work which were essential before the present flood season, in order to prevent damage to the protection and training works are detailed below, the roughly estimated cost being shown against each work:—

	In lakhs of Rs.
(1) Construction of a mole and back-water bund to protect the damaged right guide bank and the bridge from any damage	41.00
(2) Reinforcing the apron of the right guide bank by means of additional stone boulders ...	1.75
(3) Realignment and extension of the Sara and Raita protection banks	10.00
(4) Realigning, widening the apron, and extending the Damukdia Guide Bank	10.23
(5) Providing block protection round those piers which are in immediate danger of damage by the river	6.00
(6) Equipment and general charges	8.00
Grand Total ...	76.98

The following items of work will be deferred until after the present flood season, by which time it will be possible to know more definitely whether they are really necessary and also whether the proposals require to be revised in the light of further experience gained during that season:—

	In lakhs of Rs.
(1) Further extension of the right (Damukdia) Guide Bank ...	14.00
(2) Reinforcement of the left guide bank	8.40
(3) Constructing marginal levees or flood embankments at Sara and Raita	4.70
(4) Restoration of the right guide bank to its original form by repairing the existing gap in it	35.00
Grand Total	62.10

Meanwihle it was also considered advisable to provide for a ferry service, in case through rail communication over the bridge should be interrupted during the monsoon season, and in this connection it was essential that the following preliminary arrangements should be completed forthwith to enable the ferry service to be brought into use at short notice:—

	In lakhs of Rs.
(1) Acquisition of necessary land for ferry terminals and approaches	0.12
(2) Earthwork which must be completed before the flood season	0.43
(3) Purchase of new broad gauge wagon ferry	5.25
(4) Conversion of 14 miles of the existing metre gauge line to broad gauge	8.00
Total	13.00

If it should be necessary eventually to bring the ferry services into use, a further expenditure of Rs. 6.20 lakhs will be required.

The total expenditure immediately necessary is therefore Rs. 76.98 plus 13.80 = 90.78 or say, 90¾ lakhs with a possible further outlay of Rs. 63.30 lakhs later.

The molehead which is intended to serve as a temporary protection to the right abutment of the bridge consists of a stone dyke laid below low water level and an earthwork embankment above and behind it. The face of the embankment is being protected by stonework to guard against erosion by the river. The magnitude of the work involved in the erection of the dyke can be gauged from the fact that many lakhs of cubic feet of stone have been dumped into the river for the purpose, and it has taken the best part of four months to bring the dyke up to low water level.

The backwater bund has necessitated the erection of 2 parallel stone dykes laid in deep water, which have also been brought up to low water level. As an additional safeguard to effect a watertight seal between the two dykes of the back-water bund a line of steel sheet piling has been driven for a considerable distance. The mole and the backwater bund had to be raised some 40′ above low water level to be safe against high floods during the rains. Once the works had been brought up to the surface of the water, it did not take long to complete the upper portion. To ensure an uninterrupted supply of stone, new quarries have been opened in the hills around Asansol, Adra and Gomoh in addition to the existing ones in the Rajmahal hills.

Apart from the main work near the bridge itself at Paksey subsidiary river training operations are being carried out at three other points, Sara, Raita, and Damukdia. The guide bank at Damukdia is being lengthened, the stonework completed and a part of it is being realigned to ensure a smoother flow of flood water along the bank. At Sara and Raita the bank is being cut back for a similar purpose.

XXXI. INDIAN RAILWAY ELECTRIFICATION.

An investigation made by the Railway Board to obtain an accurate picture of the financial results of the electrification of the various railways of the world has shown, says 'Modern Transport,' that there are at present in existence as many as 158 separate electrification schemes that have been carried out by 90 different administrations and which cover services over 10,500 miles. These electrification schemes have been brought into existence for widely varying reasons. The National Electric Light Association has analysed the reasons, considerations and objects which have led to these schemes. The analysis shows that in the largest number of cases steep gradients have been the main reason. Next in order of importance, comes that of increasing the capacity of the existing services. The reduction in the consumption of coal, especially imported coal, the availability of cheap hydraulic power, and transportation through long tunnels have been among other consideration. Certain schemes have been provided in order either to increase the number of trains, or to improve the suburban services or to conform to the bye-laws of local authorities relating to the abolition of smoke in inhabited areas, or to develop traffic or for considerations affecting either national economics or national politics. The number of cases in which schemes of electrification have been undertaken for purely financial reasons has been found to be comparatively small.

Enquiries made by the Railway Board on the English Railway Companies of the methods adopted by them to ascertain the financial results of electrification have proved infructuous. The London-Midland and Scottish Ry., stated that no comparative costs between steam and electric traction were kept, as the decision to electrify was not based on cost. The London and North Eastern Railway were unable to sup-

ply any particulars to show the results of electrification actually carried out; but suggested that a study of the "Report of the Main Line Electrification Committee" would be helpful in considering future electrifications. The Southern Railway, who keep detailed statistics of the cost of working electric trains, have found it a matter of extreme difficulty to ascertain the corresponding expenditure saved by the steam services replaced. They also keep statistics of earnings, but are unable to assess the value of traffic retained to the Railway by electrification owing to the reduced travel arising out of the general depression and the fact that cheap fare facilities have been extended to compete with road transport. The only railway to attempt an economic comparison between the two types of operation is the German State Railway which has instituted a detailed enquiry specially for this purpose, the results of which are not yet known.

All the electrification schemes in India have however been justified financially and it should have been possible in normal circumstances to ascertain from actual experience the extent to which anticipations have been realised. But the unprecedented slump in trade has upset all calculations, reasonably based on the assumption of a normal increase and there is no jump in the gross earnings to be attributed to electrification. On the other hand the reduction in working expenses consequent on electrification cannot be readily ascertained and the large fall in traffic has a marked effect on the results.

Economics of Railway Electrification.— Writing in a recent issue of the International Railway Congress Association Bulletin, Dr. E. Huber Stocker, Consulting Engineer and Mr. H. Eckert, Chief of the Electrification Dept. of the Swiss Federal Railways discuss the electrification of railways from an economic point of view. They show how the large increase in the interest and depreciation charges of any railway which proposes to invest capital in electrification should be off-set by the reduction in the running expenses, or by the increase in the receipts or by both. Electrification serves frequently to avoid or postpone expenditure on the extension or duplication of tracks, on additional steam rolling stock and yard facilities, which would otherwise have been necessary. Even though the receipts of a railway have not been increased by electrification the mere substitution of electric for steam traction results in an economic gain; and the extent of this gain is a measure of the success of electrification. It will naturally be larger if electric traction has had the effect of increasing the receipts simultaneously with the reduction of working expenses.

The peculiarity of electric operation is that it reduces the direct working expenses while increasing those relating to interest and depreciation consequent on the investment of fresh capital. The effects of electrification on the increase in the length of run and weight of the train and the speed have financial aspects which cannot be neglected in any examination of railway electrification from an economic point of view. The larger traffic capacity of electrified services required that it should be compared with the hypothetical steam traction of the same traffic capacity, that is to say, it would be necessary to take into consideration the expenditure that would have had otherwise to be incurred on increased steam assets.

Ideal Conditions for Electrification.—Out of the one hundred and fifty-eight electrification schemes that are in existence in the world to-day no less than 81 schemes have been justified either because of steep gradients or of tunnels. The provision of increased traffic capacity has brought forty-five into existence and twenty-seven schemes have been taken up in order to reduce the consumption of coal. These figures go to show what factors have counted most whenever electrification of Railway services has been considered. And in view of these factors, the conditions for electrification are somewhat ideal for the lines between Bombay and Kalyan, to Igatpuri on the North Eastern Section of the G.I.P. and to Poona on the South Eastern Section.

About 40 miles parallel to the coast, the land rises suddenly to a level of about 2,000 feet and presents an effective barrier to transport between Bombay and the other parts of India. To negotiate these ghats, the ruling gradients of which vary from 1 in 40 to 1 in 37, the old steam services required reversing stations on the hills, in addition to special ghat engines of tremendous tractive power. Goods trains of the ordinary length and weight could not be run 'through' to their destinations and had to be cut up into smaller sections before they could be taken up or down the ghats. Extensive marshalling yards had to be provided on either side of the ghats in order to facilitate this braking up of trains. As will be readily seen, delays were inevitable and wagon stock was detained with consequent loss of traffic and increase of wagon-

hire charges. Passenger services were somewhat similarly affected. A reversing station had to be used at Khandala, the speed over the ghat section was not more than 10 to 12 miles per hour, the tunnels were full of smoke and fumes, and there was tremendous waste of fuel in the service.

One of the World's largest Schemes.—The electrification of the railway from Kalyan to Igatpuri on the North Eastern Section and from Kalyan to Poona on the South Eastern is one of the largest schemes of Main Line Electrification in the World. The traffic is worked by 65 electric locomotives of which 24 are high speed passenger locomotives and 41 are heavier goods locomotives. The tractive power of the passenger locomotives is 7,500 pounds at 70 miles per hour while the maximum exerted by the freight locomotives is 80,000 pounds at 70 miles per hour. These latter are of the regenerating type, i.e., when travelling down the steep gradients of the ghat section the motors in them function as generators and convert the energy out of the pull of gravity into electric power. Simultaneously, this conversion of energy is utilised in braking the train.

All the trains run through to their destination without being broken up and the time taken is much reduced. For instance, the mails from Bombay to Poona which used to take 3¾ hours for the journey of about 120 miles are now able to do the trip in about 2/3rd of the time. Goods trains used to take 4 to 6 hours between their arrival at Kasara and the departure from Igatpuri, distance of about 5 miles, but the electric trains now run through within an hour's time. All these lead to savings in operating costs.

Finance Results of Electrification.—The Consulting Engineers who prepared the estimate for the electrification of the Main Line anticipated a reduction in working expenses of over 42 lacs of rupees per annum for traffic which they estimated to rise in 1932-33 to over 36 lacs of train miles. They anticipated that this saving would yield a return of 7.73 per cent. of the estimated capital outlay on a capital of a little over 5½ crores of rupees. In 1930-31 owing to the unprecedented slump in trade, the train mileage was below 20 lacs, about ½ of that estimated amount. After a careful investigation the Railway Board have estimated the present costs of working of the electrified main line system as 59.39 lacs of rupees. They believe that had steam services been in existence the working expense of such services would have been 81.83 lacs. The savings that may therefore be considered to have been realised as a result of electrification are thus nearly 22½ lacs of rupees. Compared to the estimates of the Electrical Engineers these savings are roughly in proportion to the traffic that has actually run in 1930-31.

The savings are due to the reduction in the cost of fuel of over 12½ lacs, savings in repairs of nearly 13 lacs, savings in charges for water, oil etc., of nearly 7 lacs and of shunting charges, traffic delays etc. of about 2 lakhs. The savings of 22.44 lakhs rendered possible by electric traction are equivalent to a return of 4.49 per cent. and the whole capital outlay of a little over 5 crores of rupees. This return would have been substantially higher had the estimated volume of traffic been realised and can surely be regarded as a satisfactory return for a railway that has failed in recent years to yield a net return on capital outlay of anything more than 2 per cent.

New Extensions.—In a lecture delivered before the Royal Society of Arts sometime ago, Mr. E. Lydalle, M.I.E.E. has suggested that the extension of the electrification of the North Eastern main line from Igatpuri to Manmad would turn out to be a good investment. This line contains some steep gradients, more than 7 miles of which average 1 in 145 and the maximum of which is 1 in 132. The traffic is comparatively dense. The electric power station at Kalyan is of sufficiently large capacity to supply the additional quantity of current that would be found necessary and the rate per unit of current generated in this power house is sufficiently attractive. The price of materials of all kinds are phenomenally low, money is comparatively cheap, and the financial results that appear to have been obtained from electrification are sufficiently encouraging for a further step to be taken. The Railway Board have always evinced great interest in the problem of electrification and if their experts find that an extension of the electrified services could be both financially and technically justified, it is not at all improbable that the present Main Line Services will in due course cover a longer length of route.

TRANSPORT SECTION:

MOTOR TRANSPORT

With the construction of railways, a new era of transport was ushered in India. But it revolutionised the economic and social life of the country only by slow stages. Motor transport, on the other hand, though it has been in use for only about twenty years, is destined, on account of its economy and the facilities it offers, to play a more important part in the development of the country. Motor transport has conferred great advantages on the community in large cities by relieving congested areas and facilitating the delivery of goods from depots and factories. The motor vehicle has done much to improve the economic condition of the ryots by bringing them in close touch with markets and towns than was possible before. It tends to remove the isolation to which the ryot had been condemned through lack of transport and communication.

The Indian agriculturist has not yet derived the full benefits from the development of motor transport. The progress still to be made in this direction and the value of roads and transport development to rural India will be best understood when it is remembered that over 80 per cent. of the population consists of the agricultural community.

Though the Government of India has in the past concentrated its attention on the development of railways as the main communication of the country, the progress made by motor transport has been amazing. This will be seen from the imports which have risen from 2,880 cars and 76 trucks in 1913-14 to 17,399 cars and 15,300 trucks in 1929-30.

The motor transport industry is subject to very heavy taxation. In 1913-14 there was a 5 per cent. *ad valorem* import duty on motor vehicles, and accessories, etc., and 1½ annas per gallon excise tax and import duty on petrol, etc.; while at the present time a 37½ per cent. *ad valorem* on motor vehicles, etc., and 10 annas per gallon duty on petrol are levied. Again, Provincial Governments, Districts Boards and Municipalities collect a large amount by way of Registration fees, license fees, bus stand fees, etc. The tax element on a motor bus varies in the different provinces from 20 per cent. to 40 per cent. of their total operating costs.

The rules and regulations regarding the control of motor transport vary from province to province. The taxation of motor vehicles is also a matter of Provincial Legislation and even greater variations exist in this field. A Road Conference was called in Simla in September 1931 and model motor vehicle rules suitable for application throughout the country were drafted. Since the Conference, many provinces have introduced taxation on a Provincial basis, abolishing tolls and other taxes previously levied by local authorities.

In countries like England and France, road *versus* rail is one of the most complicated and the most embarassing problems of the day ; and the solution has been by no means easy to find. In India, the problem has not yet gained such proportions, and we have the advantage of having before us both the difficulties and the solutions of other countries. Messrs. Mitchell and Kirkness were appointed by the Government of India in 1932 to enquire into and make a report on the present state of road and railway competition and the possibilities of their future co-ordination and organic development. The material gathered by the official experts encourages the hope that, though our problem might very soon develop an identity with that of foreign nations, present conditions admit of a true correlation of road and rail transport with advantge to the interests concerned, and the public at large. This is not to suggest that conflict of interests has not developed already. The shrinkage in railway revenue is attributable in part at least to the competition of motor transport. In passenger traffic the motor has made a more serious inroad. And even in goods the Light Railways have been seriously affected. But in a comprehensive consideration of the problem as a whole, one must attach importance to the large scope that still remains in

the transport needs of the country as a whole and the facility which such scope offers for the happy adjustment of conflicting forces. The Road-rail Conference which met in Simla in April 1933, considered the problems on the basis of the material gathered by Messrs. Mitchell and Kirkness. The following resolutions were accepted at the Road-rail Conference.

"In areas where uneconomic competition between railway and road transport has been proved to exist, such increased co-operation and co-ordination may necessitate the adoption, by mutual agreement, of measures designed to reduce such uneconomic competition to the minimum compatible with the maintenance of healthy competition.

"Any comprehensive or uniform plan of general development must sooner or later involve a gradual expansion of facilities for rural motor transport, complementary to the Railways and to other arterial roadways, but as internal district communications—apart from the main arteries—are largely controlled by local bodies, any intra-provincial co-ordination of effort must necessarily in the first instance be a matter for the local Government and legislatures, who, in such matters, should consult, and to the best of their ability, co-operate with the Railway and other interests concerned.

"In order to ensure increased co-operation and more intelligent co-ordination of effort between the various authorities concerned, the Conference considered that the following measures would be justifiable:—

(*a*) The control of public service and goods motor transport should be regulated in the interests of public safety and convenience.

(*b*) The number of vehicles licensed to ply for hire should be restricted so as to prevent such competition between all forms of transport as may be contrary to the public interest.

"This Conference considers that the statutory provisions which at present limit the operation of motor services by certain railways should be repealed.

"This Conference recommends that the present regulations regarding public service and goods motor transport should be reviewed with the object of amending them so as to afford every encouragement to the development of rural services even to the extent in exceptional cases of granting of monopolies for limited periods.

"This Conference considers that, in the interests of all concerned, a co-ordinated plan should be drawn up for the taxation of motor transport by the various authorities.

"This Conference considers that —

(*a*) the present road development account should be continued for the duration of the present constitution and would urge that provision for its continuance be made in the new constitution:

(*b*) the class of roads to which the road development account should be applied including the maintenance of roads constructed from that account, be reconsidered.

(*c*) in present circumstances the most urgent need is an improvement in the efficiency, and a reduction in the cost, of the transport of agricultural produce to markets and thence to the railways ; future road development programmes should be framed accordingly."

In the past there has been very little control of motor transport. The questions of comfort, amenities and convenience have been left to adjustment by the laws of supply and demand and competition. The evils arising through freedom from control and from competition probably outweighs the benefits. Some general tightening of control would be necessary in the interest of the public, so as to ensure a safe, comfortable and convenient public service. The present internal competition amongst motor transport services has been mainly due to the lack of organisation among themselves. A remunerative route has generally a large number of buses running on it, each of which competes with and often undercuts the rates of the others. However, the formation of Bus Unions in some parts of the country has brought about a welcome change.

The potentialities for further development of motor transport in India are great. Many large areas have no modern form of transport. Construction of railways in these areas cannot be economically justified ; and consequently motor vehicles have an important part to play in providing an economic and fast mode of transport between markets and railways. The manufacture of vehicles capable of running under conditions hitherto considered impossible, has been made possible by recent advances in the industry.

Motor transport has, by its widespread, flexible, efficient service established itself in this country as an indispensable feature of everyday life ; and it has before it an even greater future in promoting the economic and social well-being of the people of India, in general, and of the agricultural population in particular.

CO-OPERATIVE SECTION:

CO-OPERATION IN INDIA

Contrary to what one might expect from the natural wealth of India, the Indian peasant is steeped in poverty. The danger to the nation as a whole will be evident when the predominance of the agricultural population in India is taken into account. The poverty of the Indian cultivator is due to several causes. The holdings of the cultivators have been subject to frequent fragmentation, mainly due to the Hindu and Mohammedan laws of inheritance, with the result that the average holding has become very small and uneconomic. The Indian cultivator is exposed to the vagaries of the monsoon ; but this unfavourable condition has been largely mitigated by the sound policy of irrigation adopted by the State. All these factors have resulted in his heavy indebtedness. Progress is rendered all the more difficult by his illiteracy. The problem of rural uplift is imprisoned in many a vicious circle and it is co-operation that must break all such vicious circles.

It is more than a quarter of a century since the co-operative movement began in India. The movement was largely influenced by the two most outstanding examples in co-operation abroad—Germany and Denmark. Economic conditions in Germany in the middle of the last century, in so far as they affected the agriculturist, were not much different from those in India to-day. The small farmer was exploited by the money-lender. The success of the institutions abroad attracted the attention of those who were anxiously looking for assistance in solving the problem of rural poverty. The Government of Madras took the initiative and Mr. Nicholson who was deputed to study the problem, brought out a very valuable report. In the United Provinces and the Punjab several societies were organised on the initiative of the Government. The Famine Commission of 1901 strongly advocated the establishment of mutual Credit Societies. The recommendations were carefully considered by two committees ; and these efforts led to the passing of the Co-operative Credit Societies Act of 1904.

The Act provided only for the formation of credit societies. The main reason for this restriction was that in a relatively backward population, the non-credit organisations might encounter too many impediments. Also, special emphasis was laid on rural credit on account of its more urgent character.

The various provincial governments immediately gave effect to the policy of co-operation. A separate department was formed and with the increasing progress, the department grew in numbers and importance. The aim of the department, from the beginning, was to instruct the people as to the benefits of co-operation and train individuals for the task of managing the new societies in accordance with co-operative principles. In the first few years the number of societies grew up slowly, but from 1910 the growth was much accelerated ; and soon it exceeded the expectations of its promoters. The credit societies paved the way for societies for distribution and other non-credit purposes. There was a great need for the free supply of capital and improved system of supervision ; and various central agencies were established to control and finance the primary credit societies. But these organisations had no legal recognition.

In order to remove the deficiencies of the Act of 1904, a revised Act was passed in 1912, known as the Co-operative Societies Act of 1912. The non-credit forms of co-operation were recognised by this Act. It also recognised the three kinds of central societies as distinguished from primary societies, namely, Unions consisting of primary societies for mutual control and audit ; central banks consisting of societies and individuals and provincial banks consisting of individuals. In certain provinces the unlimited liability societies were allowed, subject to consent by the provincial governments concerned, to declare dividends in view of the importance of share capital. According to the new Act, the distinction between societies was made on a more

scientific basis namely, "limited" and "unlimited liability" societies.

The new Act gave a fresh impetus to the movement. New types of societies, such as co-operative produce sale societies, milk supply societies and cattle insurance societies were started ; and many of them made good progress. There was a rapid increase in the number of central societies ; and the movement was winning the confidence of the public. The Reforms Act of 1919 made co-operation a provincial Transferred Subject ; and every province was enabled to make progress on lines best suited to its local needs.

Though the movement has made rapid strides, the progress has not been uniform in the different parts of the country. Bengal, the Punjab and Madras have the largest number of societies while a major province like Bombay and others like Bihar and Orissa, the United Provinces, the Central Provinces, Burma and Assam have a distinctly smaller number of societies. The co-operative movement has also made considerable progress in many of the Indian Native States. Bhopal and Gwalior have the largest number of societies among the Native States.

In spite of the steady progress of the movement for nearly twenty years, the burden of agriculturist indebtedness has hardly lessened. This is due to the reason that co-operative credit was confined only to short-term loans. To remedy this defect, a Co-operative Land Mortgage Bank was started in Punjab in 1920 ; and soon the other provinces followed suit. Defaults in repayment of loans and other defects became common. The various provinces established Co-operative Enquiry Committees and certain provinces like Bombay and Madras passed their own Provincial Co-operative Acts.

The non-credit co-operative movement had to encounter more obstacles and its progress was comparatively slow. Co-operative Cotton Sale Societies were established in Karnatak, Guzerat and Khandesh. In Burma cattle insurance societies were established and several co-operative irrigation societies sprang up in Bengal and in Bombay. But the most remarkable form of non-credit co-operation in India is the consolidation of holdings by co-operation in the Punjab. Many important recommendations for the progress of both the credit and non-credit forms of co-operations have been made by the Royal Commission on Agriculture appointed in 1926 and the recent Indian Central and Provincial Banking Enquiry Committees.

The co-operative movement was much affected by the period of depression. At the instance of the Government of India, an All-India Co-operative Conference was held in January, 1934. The Conference was attended by the Registrars of Co-operative Societies, the Ministers in charge of co-operation of the various provinces and the representatives of the two All-India organisations the Institute's Association and the Provincial Banks' Association. The Conference recommended the enactment of an All-India Co-operative Societies Act so as to permit the registration of co-operative societies working in the whole of India or in more than one province. It also recommended that the Government should help the development of land mortgage banks by both guaranteeing the interest on their debentures as well as the capital. A third suggestion was the creation of a Central Board in order to bring about a closer co-ordination of work between the different provinces and States of India.

Though the co-operative movement has produced valuable results it has not gone to the root of the economic and social ills from which the country is suffering to-day. But its achievements cannot be denied. "Knowledge of the co-operative system is now widespread ; thrift is being encouraged ; training in the handling of money and in elementary banking principles is given. Where the co-operative movement is strongly established, there has been a general lowering of the rate of interest charges by money-lenders ; the hold of the moneylender has been loosened, with the result that a marked change has been brought about in the outlook of the people."

It must be, however, admitted that all these benefits have been secured only on a small scale. Much remains yet to be attained in the sphere of non-agricultural co-operation. Even agricultural co-operation has been practically confined to the sphere of credit. The various defects in the present working of the movement—such as unpunctuality of payments, unnecessary delay in issuing loans and the appointing of those who are not properly trained for the task should be remedied. In co-operation lies the future of rural India. "If co-operation fails, there will fail the best hope of rural India."

Table I

(a) Number of Societies for all India showing the increase since 1910-11

1	Average for 5 years from 1910-11 to 1914-15	Average for 5 years from 1915-16 to 1919-20	Average for 5 years from 1920-21 to 1924-25	Average for 5 years from 1925-26 to 1929-30	1930-31	1931-32
	2	3	4	5	6	7
Central (including Provincial and Central Banks and Banking Unions)	231	304	506	587	607	605
Supervising and Guaranteeing Unions (including Re-insurance Societies)		638	1,302	1,394	1,256	1,091
Agricultural (including Cattle Insurance Societies ...	10,891	25,873	51,716	83,093	93,773	93,598
Non-Agricultural	664	1,662	4,183	8,862	10,530*	10,756
TOTAL ...	11,786	28,477	57,707	93,936	1,06,166	1,06,050

*Including two Insurance Societies.

(b) Number of Societies by Provinces and States for 1931-32

Province	Population (millions)	Central	Supervising and guaranteeing unions	Agricultural	Non-Agricultural	Total No. of societies	No. of societies per 1,00,000 inhabitants
Bombay	21·9	20	118	4,841	899	5,878	26·8
Punjab	23·6	120	...	17,590	3,120	20,820	88·3
United Provinces	48·4	71	3	5,418	301	5,793	12·0
Bihar & Orissa	37·7	68	113	8,799	329	9,309	24·7
Bengal	50·1	120	3	21,493	2,106	23,722	47·3
Assam	8·6	19	...	1,299	91	1,409	16·4
Burma	13·1	11	356	2,087	160	2,614	20·0
Madras	46·7	33	431	12,563	1,512	14,539	31·1
Central Provinces & Berar ...	15·5	36	16	3,780	94	3,926	25·3
N. W. F. Province	2·4	1	...	289	15	305	12·7
Coorg	0·2	1	13	214	25	253	126·5
Ajmer-Merwara	0·6	7	2	553	104	666	111·0
Hyderabad Administered Area ...	0·1	...	...	...	19	19	19·0
Delhi	0·6	1	...	223	55	279	46·5
Total (British India) ...	269·5	508	1,055	79,149	8,830	89,542	33·2
Mysore	6·6	14	...	1,744	423	2,181	33·0
Baroda	2·4	6	1	871	135	1,063	44·3
Hyderabad	14·4	34	...	2,013	363	2,410	16·7
Bhopal	0·7	22	7	1,135	27	1,191	170·1
Gwalior	3·5	...	..	4,015	41	4,106	117·5
Indore	1·3	5	...	497	48	550	42·3
Kashmir	3·6	14	...	2,572	857	2,943	81·7
Travancore	5·1	1	28	1,412	377	1,818	35·6
Cochin	1·2	1	...	140	105	246	20·5
Total (Indian States) ...	38·8	97	36	14,449	1,926	16,508	42·5
GRAND TOTAL ...	308·3	605	1,091	93,598	10,756	1,06,050	34·4

Table II

(a) *Number of Members* for all India showing the increase since 1910-11

1	Average for 5 years from 1910-11 to 1914-15	Average for 5 years from 1915-16 to 1919-20	Average for 5 years from 1920-21 to 1924-25	Average for 5 years from 1925-26 to 1929-30	1930-31	1931-32
	2	3	4	5	6	7
Central (including Provincial and Central Banks and Banking Unions)	23,677	89,925	1,63,822	2,12,093	2,02,066	2,04,749
Supervising and Guaranteeing Unions (including Re-insurance Societies)		10,971	24,437	34,621	35,512	36,510
Agricultural (including Cattle Insurance Societies) ...	4,59,096	9,02,930*	16,61,098	27,91,562	31,65,925	31,09,383
Non-Agricultural (including other insurance Societies) ...	89,157	2,26,031	4,93,509	8,97,279	11,42,337	11,84,956
Total Number of Members of primary Societies ...	5,48,253	11,28,961	21,54,607	36,88,841	43,08,262	42,94,339

*Excluding members of Cattle Insurance Societies at the end of 1915-16 and 1916-17, and those in Bombay and the United Provinces at the end of 1917-18.

(b) *Number of Members* by Provinces and States for 1931-32.

Province	Population (millions)	Central Including (Provincial & Central Banks and Banking Unions)	Supervising & guaranteeing unions (Including Reinsurance Societies)	Agricultural (including cattle Insurance Societies)	Non-Agricultural (Including other insurance Societies)	Total No. of members of primary Societies	No. of Members of primary Societies per 1,000 inhabitants
Madras	46·7	16,688	11,009	6,75,149	2,63,609	9,39,058	20·1
Bombay	21·9	14,136	3,014	3,22,969	2,45,204	5,68,179	25·9
Bengal	50·1	25,186	290	5,29,139	2,42,011	7,71,450	15·4
Bihar & Orissa	37·7	12,145	10,330	2,34,428	27,460	2,61,888	6·9
United Provinces	48·4	10,791	106	1,17,176	29,932	1,47,108	3·0
Punjab	23·6	35,575	...	5,70,332	1,10,154	6,80,486	28·8
Burma	13·1	1,723	2,192	46,844	30,382	77,726	5·9
Central Provinces & Berar ...	15·5	56,503	7,411	57,396	18,060	75,456	4·9
Assam	8·6	1,888	...	54,684	14,880	69,564	8·1
N. W. F. Province	2·4	177	...	8,093	1,423	9,516	4·0
Coorg	0·2	335	211	11,588	2,975	14,563	72·8
Ajmer Merwara	0·6	1,621	122	12,319	6,332	18,651	31·1
Hyderabad Administered area ...	0·1	...	...	...	7,552	7,552	75·5
Delhi	0·6	485	...	5,249	2,944	8,193	13·7
Total (British India) ...	269·5	1,77,543	34,685	26,45,966	10,03,418	36,49,384	13·5
Mysore	6·6	3,168	...	71,790	67,757	1,39,547	21·1
Baroda	2·4	1,320	34	25,323	12,909	38,232	15·9
Hyderabad	14·4	4,462	...	42,128	16,585	58,713	4·1
Bhopal	0·7	2,485	158	20,316	462	20,778	29·7
Gwalior	3·5	7,463	...	70,405	644	71,049	20·3
Indore	1·3	1,876	..	9,483	5,559	15,042	11·6
Kashmir	3·6	3,418	...	47,336	6,932	54,268	15·1
Travancore	5·1	2,874	1,633	1,64,626	57,708	2,22,334	43·6
Cochin	1·2	140	...	12,010	12,982	24,992	20·8
Total (Indian States) ...	38·8	27,206	1,825	4,63,417	1,81,538	6,44,955	16·6
GRAND TOTAL ...	308·3	2,04,749	36,510	31,09.383	11,84,956	42,94,339	13·9

Table III

(*a*) *Working Capital* for all India showing the increase since 1910-11

1	Average for 5 years from 1910-11 to 1914-15	Average for 5 years from 1915-16 to 1919-20	Average for 5 years from 1920-21 to 1924-25.	Average for 5 years from 1925-26 to 1929-30.	1930-31.	1931-32.
	2	3	4	5	6	7
	R (1,000)	R (1,000)	R (1,000)	R (1,000)	R (1,000)	R (1,000)
Share capital paid up	88,87	2,51,97	5,25,66	9,94,17	12,40,83	12,65,60
Loans and deposits held at the end of the year from Members	88,28	96,35	2,54,45	5,03,42	6,77,93	6,83,12
Loans and deposits held at the end of the year from Societies	1,93,42*	47,81	1,49,98	2,92,88	3,20,24	3,50,98
Loans and deposits held at the end of the year from Provincial or Central Banks	...	5,03,19	12,29,88	21,62,43	29,29,59	27,98,65
Loans and deposits held at the end of the year from Government	10,87	25,58	67,69	1,63,34	1,74,81	1,68,72
Loans and deposits held at the end of the year from Non-Members and other sources	1,41,98	4,70,25	10,96,22	23,59,68	28,15,70	28,58,57
Reserve and other Funds	25,00	1,23,32	3,12,38	7,13,21	10,32.12	11,43,51
TOTAL ..	5,48,42	15,18,47	36,36,26	74,89,13	91,91,22	92,69,15

* Includes loans from Provincial or Central Banks.

(*b*) *Working Capital* by Provinces and States for 1931-32

Province	Population	Share Capital Paid-up	Loans & Deposits held at the end of the year from Members	Societies	Provincial or Central Banks	Non-members and other sources	Government	Reserve and other funds	Total	No. of annas per head of population
	Mllns.	R(1,000)	R(1,000)	R(1,000)	R(1,000)	R(1,000)	R(1,000)	R(1,000)	R(1,000)	
Madras	46'7	2,36,35	89,13	98,67	5,58,31	5,47,54	34,50	1,40,28	17,04,78	58
Bombay	21'9	1,86,52	2,96,09	72,48	2,96,88	4,28,06	50,34	1,11,74	14,42,11	105
Bengal	50'1	2,05,42	93,67	25 35	5,19,54	5,75,10	70	1,92,17	16,17,95	92
Bihar & Orissa ...	37'7	57,75	17,27	3,95	2,43,76	2,04,65	69	58,92	5,86,90	25
United Provinces ...	18'4	58,66	11,01	3,23	52,80	51.26	18	45,26	2,22,40	7
Punjab	23'6	1,38,22	61,79	74,40	6,34,31	5,86,59	13,73	2,80.97	18,43.01	125
Burma	13'1	84,54	10,09	8,27	48,09	20,32	9,33	73,38	2.54,02	31
Central Provinces & Berar	15'5	34,45	5,35	31,51	2,10,38	1,79,72	...	70,14	5,31,55	55
Assam	8'6	8,12	9,00	1,74	20,31	29,92	95	11,66	81,70	15
N. W. F. Province ...	2'4	2,09	72	33	5,52	4,95	...	67	14,28	10
Coorg	0'2	2,86	39	49	2,13	2,70	11	2,74	11,42	91
Ajmer-Merwara ...	0'6	6.80	4,21	1,59	10,13	14,99	...	9,83	47,55	127
Hyderabad Administered Area	0'1	2,16	4,13	25	...	...	12	34	7,00	112
Delhi	0'6	2.74	1,46	21	6,55	10,89	...	2,56	24,41	65
Total (British India) ..	269'5	10,77,68	6,12,31	3,22,47	26,08,71	26,56,69	1,10,56	10,00,66	83,89,08	50
Mysore	6'6	49,76	36,63	7,21	28,58	51,90	3,90	25,80	2,03,78	49
Baroda	2'4	6,37	11,32	2,46	14,71	25,99	5,41	10,47	76,73	51
Hyderabad	14'4	47,33	5,22	2,46	76,91	57,15	3,30	28,82	2,21,19	25
Bhopal	0'7	1,32	2	1,41	8,90	4	3,83	9,20	24,72	57
Gawalior	3'5	15,43	1,69	9,80	...	10,52	33,07	23,61	94,12	43
Indore	1'3	3,86	5,81	29	15,09	16,23	2,95	13,82	58,05	71
Kashmir	3'6	25.99	15	1,03	31,82	17,97	4,99	19,89	1,01,84	45
Travancore	5'1	34,65	6,78	1,93	10,22	15,60	45	7.75	77,38	24
Cochin	1'2	3,21	3,19	1,92	3,71	6,48	26	3,49	22,26	30
Total (Indian States) ...	38'8	1,87,92	70,81	28,51	1,89,94	2,01,88	58,16	1,42,85	8,08,07	36
GRAND TOTAL	308'3	12,65,60	6,83,12	3,50,98	27,98,65	28,58,57	1,68,72	11,43,51	92,69,15	48

POPULATION STATISTICS

AREA AND POPULATION OF PRINCIPAL COUNTRIES

Countries	Area in Square Miles	Latest Census year	Males (In Millions)	Females (In Millions)	Total population
India	1,805,332	1931	181·9	171·1	353·0
Australia	2,974,581	1921	2·8	2·7	5·4
Union of S. Africa	472,347	1921	3·5	3·4	6·9
Canada	3,729,665	1931	5·4	5·0	10·0
Great Britain and North Ireland ...	94,663	1931	22·1	24·0	46·1
United States of America	2,973,776	1930	62·1	60·6	122·8
Brazil	3,275,510	1920	15·4	15 2	30·6
Mexico	767,198	1930	8·1	8·3	16·4
China	4,278,352	1932	......	......	474·8
Japan	147,592	1930	32·4	32·1	64·5
Germany	181,723	1925	30·2	32·2	62·4
France	212,659	1931	......	......	41·8
Italy	119,713	1931	20·1	21·1	41·2
Soviet Russia (USSR)	8,241,921	1926	71·0	76·0	147·0

Infant Mortality

Deaths Under One Year for 1,000 Living Births

Countries	Annual Average between 1921-25	1926 30	1928	1929	1930	1931	1932
(British) India	192	177	173	178	180		
Union of S. Africa (white population only) ...	73	67	71	64	67	65	59
Canada	98	93	90	92	89	85	..
Australia	58	52	53	51	47	42	41
United Kingdom	78	70	68	76	63	68	68
U. S. A.	74	68	69	68	65	62	63
Japan	159	137	138	142	124	132	..
Germany	122	94	89	96	85	83	148
France	95	89	91	95	78	76	76
Italy	126	119	120	125	106	...	...

Annual Rate of Excess of Births for 1,000 Inhabitants

Countries	Annual Average between 1921-25	1926-30	1928	1929	1930	1931	1932
British India	6·7	9·0	10·5	8·7	8·4	...	...
Union of S. Africa	17·4	16·4	15·6	16·7	16·7	16·0	14·4
Canada	16·2	13·0	13·0	12·2	13·2	13·1	...
Australia	14·4	11·7	11·8	10·7	11·3	9·5	8·3
United Kindom	8·0	4·9	5·3	3·1	5·1	3·8	3·5
U. S. A.	10·7	7·9	7·7	7·0	7·6	6·7	6·6
Japan	12·8	14·1	14·3	12·9	14·2	13·2	...
Germany	8·8	6·6	7·0	5·3	6·4	4·8	...
France	2·1	1·4	1·9	0·2	2·4	1·1	1·5
Italy	12·4	10·8	10·6	9·1	12·6	10·1	9·2

Annual Birth Rate for 1,000 Inhabitants

Countries	Annual Average between 1921-25	1926-30	1928	1929	1930	1931	1932
India (British only)	32·7	33·2	34·3	32·7	32·9	...	...
Union of S. Africa	27·1	26·1	25·8	26·2	26·4	25·5	24·3
Canada	27·4	24·1	24·1	23·5	23·9	23·2	...
Australia	23·9	21·0	21·3	20·3	19·9	18·2	17·0
U. S. A.	22·5	19·7	19·8	18·9	18·9	17·8	17·8
United Kingdom	20·4	17·2	17·2	16·7	16·8	16·3	15·8
Japan	34·6	33·4	34·1	32·7	32·4	32·2	...
Germany	22·1	18·1	18·6	17·9	17·5	16·0	...
France	19·3	18·2	18·3	17·7	18·0	17·4	17·3
Italy	29·7	26·8	26·6	25·6	26·7	24·9	28·8

Annual Death Rate for 1,000 Inhabitants

Countries	Annual Average between 1921-25	1926-30	1928	1929	1930	1931	1932
(British) India	26·0	24·2	23·8	24·0	24·5	...	...
Union of South Africa ...	9·7	9·7	10·2	9·5	9·7	9·5	9·9
Canada	11·2	11·1	11·1	11·3	10·7	10·1	...
Australia	9·5	9·3	9·5	9·6	8·6	8·7	8·7
United Kingdom	12·4	12·3	11·9	13·6	11·7	12·5	12·3
U. S. A. ...	11·8	11·8	12·1	11·9	11·3	11·1	10·8
Japan	21·8	19·3	19·8	19·3	18·2	19·0	..
Germany	13·3	11·8	11·6	12·6	11·1	11·2	.
France	17·2	16·8	16·4	17·9	15·6	16·3	15·8
Italy	17·3	16·0	16·0	16·5	14·1	14·8	14·6

The Population of Indian Provinces and States as per Census of 1931 and 1921

(Population in millions)

	1931 Census			1921 Census		
	Total	Males	Females	Total	Males	Females
Assam	8·6	4·5	4·1	7·5	3·9	3·6
Bengal	50·1	26·0	24·1	46·7	24·2	22·5
Bihar and Orissa ..	37·6	18·8	18·8	34·0	16·8	17·2
Bombay	22·2	11·7	10·5	19·3	10·2	9·2
Burma	14·7	7·5	7·2	13·2	6·8	6·4
Central Provinces and Berar	15·5	7·8	7·7	13·9	6·9	7·0
Madras	46·7	23·1	23·6	42·3	20·9	21·4
Punjab	23·6	12·9	10·7	20·7	11·3	9·4
U. P.	48·4	25·4	23·0	45·4	23·8	21·6
Baroda	2·4	1·3	1·1	2·1	1·1	1·0
Gwalior	3·5	1·9	1·6	3·2	1·7	1·5
Hydrabad	14·4	7·3	7·1	12·5	6·4	6·1
Kashmir	3·6	1·9	1·7	3·3	1·8	1·5
Mysore	6·6	3·4	3·2	6·0	3·1	2·9
Cochin	1·2	·6	·6	1·0	·5	·5
Travancore	5·1	2·6	2·5	4·0	2·0	2·0
Total British India ...	271·7	140·1	131·6	246·9	126·8	120·1
Total States and Agencies ...	81·2	41·9	39·3	72·1	37·2	34·9
Total Indian Population ...	353·0	181·9	171·1	318·9	164·0	154·9

Population of the Indian Cities.

	Population in 1931	Population in 1921
Ajmer-Merwara—		
Ajmer	119,524	113,512
Bengal—		
Calcutta Proper	1,196,833	1,077,264
Howrah	222,488	195,301
Dacca	138,518	119,450
Bihar & Orissa—		
Patna	158,230	119,976
Bombay—		
Bombay	1,157,851	1,175,914
Ahmedabad	310,000	274,007
Karachi	260,639	216,883
Poona	163,100	214,796
Sholapur	135,632	119,581
Burma—		
Rangoon	400,415	345,621
Mandalay	144,899	148,917
C. P. & Berar—		
Nagpur	215,003	145,193
Jabbulpur	124,469	108,793
Delhi—		
Delhi	447,442	304,420
Madras—		
Madras	667,228	526,911
Madura	182,007	138,894
Trichinopoly	141,640	120,422
Salem	102,181	52,244
N.-W. Provinces—		
Peshawar	121,866	104,452
Punjab—		
Lahore	429,747	281,781
Amritsar	264,840	160,218
Multan	119,457	84,806
Rawalpindi	119,284	101,142
United Provinces—		
Lucknow	274,659	240,566
Cawnpore	243,755	216,436
Benares	205,315	198,447
Agra	229,764	185,532
Allahabad	183,914	157,220
Bareilly	144,031	129,459
Meerut	136,709	122,609
Moradabad	110,562	82,671
Baroda State—		
Baroda	127,327	94,712
Central India Agency—		
Indore	127,327	93,091
Hyderabad State—		
Hyderabad	377,006	404,187
Jammu and Kashmir—		
Srinagar	173,649	141,735
Mysore—		
Bangalore (including Civil and Military Station)	306,365	237,496
Rajputana Agency—		
Jaipur	144,179	120,207